REPORT RESUMES

ED 003 528 56
A STUDY OF PRESERVICE TEACHER EDUCATION IN THE USE OF MEDIA
OF MASS COMMUNICATION FOR CLASSROOM INSTRUCTION.
BY- OLIVER, C.E. AND OTHERS
GEORGIA UNIV., ATHENS, COLL. OF EDUCATION
REPORT NUMBER NDEA-VIIA-130 PUB DATE 62
GRANT OEG-709006
EDRS PRICE MF-$0.18 HC-$4.52 113P.

DESCRIPTORS- *INSTRUCTIONAL TECHNOLOGY, *MEDIA RESEARCH, *TEACHER EDUCATION, *INSTRUCTIONAL AIDS, *INSTRUCTION, ATHENS, GEORGIA

A STUDY WAS CONDUCTED (1) TO ASCERTAIN WHAT EMPHASIS COULD BE PLACED ON THE EFFECTIVENESS OF VARIOUS TYPES OF INSTRUCTIONAL MEDIA FOR PRESERVICE TEACHER EDUCATION PROGRAMS, AND (2) TO ESTABLISH EFFECTIVE PROCEDURES FOR THE SELECTION AND UTILIZATION OF THESE MEDIA FOR TEACHING. THE PROCEDURES INVOLVED (1) CONDUCTING A LITERATURE SEARCH, (2) PREPARING A LIST OF INFORMATION, SKILLS, ATTITUDES, COMPETENCIES, AND EXPERIENCES, (3) USING A QUESTIONNAIRE AND INTERVIEWS TO GATHER OPINIONS OF SUPERVISING TEACHERS, (4) USING THE PREVIOUS INFORMATION FOR SELECTING EXPERIENCES TO BE USED IN THE INSTRUCTIONAL PHASES OF THE PROJECT, (5) PLANNING AND CONDUCTING 20 HOURS OF CLASS INSTRUCTION, (6) COORDINATING THIS INSTRUCTION WITH 3 MONTHS OF LABORATORY WORK IN INSTRUCTIONAL MEDIA FOLLWED BY 3 MONTHS OF STUDENT-TEACHER FIELD EXPERIENCE, (7) CONDUCTING AN ORGANIZED FOLLOWUP, AND (8) ANALYZING ALL COLLECTED DATA ON A COMPARATIVE BASIS. CONCLUSIONS INDICATED--(1) IF SPECIFIC EMPHASIS IS PLACED ON THE CLASSROOM USE OF INSTRUCTIONAL MEDIA DURING PRESERVICE TEACHER EDUCATION, THAT THE RESULTS OF THAT EMPHASIS WILL BE REFLECTED IN THE EFFECTIVENESS OF THE CLASSROOM USE OF SUCH MEDIA BY BEGINNING TEACHERS, (2) INSTRUCTIONAL USE OF MEDIA SHOULD BE EMPHASIZED DURING STUDENT-TEACHING, (3) PRESERVICE EMPHASIS ON INSTRUCTIONAL MEDIA SHOULD RECOGNIZE CONDITIONS IN THE SCHOOLS EMPLOYING TEACHER-EDUCATION GRADUATES, (4) THE INSTRUCTIONAL MEDIA PROGRAM FOR PRESERVICE EDUCATION SHOULD BE HIGHLY FLEXIBLE TO ALLOW FOR ADAPTATION OF CONTENT TO THE CHANGING STATUS OF TECHNOLOGICAL DEVELOPMENTS IN TEACHING MEDIA. (HB)

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Office of Education
This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated do not necessarily represent official Office of Education position or policy.

A STUDY OF PRE-SERVICE TEACHER EDUCATION IN THE USE OF MEDIA OF MASS COMMUNICATION FOR CLASSROOM INSTRUCTION

G. E. Oliver, Project Director
Chairman, Audio-Visual Education
College of Education
University of Georgia
Athens, Georgia

Title VII Project Number 130
National Defense Education Act of 1958
Grant Number 709006

The Research Reported Herein Was
Supported by a Grant from the
U. S. Department of Health, Education, and Welfare
Office of Education
1959 - 1962

ED003528

COLLEGE OF EDUCATION
University of Georgia
Joseph A. Williams, Dean

Advisory Committee for the Project:

- John A. Dotson, Dean Emeritus
- James E. Greene, Chairman, Division of Graduate Studies
- James L. Dickerson, Coordinator, Demonstration and Practice Laboratories
- Rachel S. Sutton, Chairman, Elementary Education
- Stanton J. Singleton, Chairman, Secondary Education

Graduate Assistants:

- Nelle Still -- for Instruction
- Billy J. Dawson -- for Administration
- Aubrey M. Finch -- for Research

Secretary: Mavis N. Allgood

ACKNOWLEDGMENT

To recognize by name all who participated in this project and to measure in specific terms the values which have accrued to the University of Georgia and to the public schools and school personnel throughout Georgia as a by-product of the project will be impossible.

Participation, direct and indirect, was on several levels. Students in the College of Education comprised the experimental group. Former students, currently teaching in the public schools of Georgia, comprised the control group. Other participants included: supervising teachers engaged in the student teaching program, administrators and teachers in representative school systems employing University of Georgia graduates as teachers, administrators and teachers in the public schools cooperating with the University in the student teaching program, and members of the College of Education faculty. Over seven thousand individuals engaged in public elementary, secondary, and higher education in Georgia participated in various phases of the project. A debt for the work of these people is acknowledged. It is apparent in many ways that their contribution to the project has made all who participated more concerned about the relationship of instructional media in the total school program.

Special recognition is made of the assistance of the staff of the College of Education for their participation. Since the project did not involve a special instructional media course, time from other professional courses was utilized to accomplish instructional objectives. The cooperation of the College of Education staff was essential. This cooperation was freely given.

September, 1962
Athens, Georgia

G. E. Oliver
Project Director

FOREWORD

This report documents a project in teacher education and instructional media conducted at the University of Georgia between July, 1959, and June, 1962, under provisions of Title VII of the National Defense Education Act of 1958. The project developed and studied the effectiveness of one approach to emphasizing teacher competencies in the classroom use of several types of instructional media during the pre-service program. Instruction was added to existing required courses in curriculum planning and teaching procedures as a coordinated phase of those courses. The effectiveness of instruction was assessed by a follow-up of beginning teachers in the public schools of Georgia. Certain practices in the classroom use of instructional media by beginning teachers were compared with practices by teachers who were students at the University of Georgia but who experienced no organized emphasis on instructional media during their pre-service teacher education program. It is the purpose of this report to describe what was done, how it was done, with what results, and to draw from the project implications for the education of teachers.

For purposes of the project instructional media were selected which are commonly available in the public schools of Georgia and which do not vary in content, nature, or conditions required for effective use in classroom instruction. Only prepared materials were considered in the study. Specifically the project was based on a study of the use of media listed in the National Defense Education Act of 1958--motion picture films, filmstrips, slides, recordings, and radio and television programs--as classroom instructional media. This limitation was imposed to add objectivity to the study. In fact, it seemed improbable that a satisfactory method could be devised in a project of this type for use in measuring the effectiveness of teacher education in the classroom use of other instructional media.

All activities of the project are not reviewed fully in this report. Far more data were collected than could be coordinated for purposes of such a report. This summary includes only those data which may be of interest to teacher education institutions seeking some way to add appropriate experiences in instructional media to their pre-service programs.

TABLE OF CONTENTS

CHAPTER PAGE

Foreword i

I. OVERVIEW OF THE PROJECT. 1

II. COMPETENCIES IN THE CLASSROOM USE OF INSTRUCTIONAL MEDIA 8

III. DEVELOPING COMPETENCIES DURING THE PRE-SERVICE TEACHER EDUCATION PROGRAM. 32

IV. STATUS OF THE USE OF INSTRUCTIONAL MEDIA IN THE PUBLIC SCHOOLS OF GEORGIA 54

V. SUMMARY AND IMPLICATIONS 71

APPENDICES 78

APPENDICES

APPENDIX

A. SUPERVISING TEACHER QUESTIONNAIRE FORM -- COMPETENCIES 79

B. STUDENT TEACHER REPORT FORM -- USE OF MEDIA. 82

C. EXPERIMENTAL AND CONTROL QUESTIONNAIRES -- CLASSROOM UTILIZATION OF MEDIA 84

D. SUPERINTENDENT, PRINCIPAL, AND TEACHER SURVEY FORMS -- PUBLIC SCHOOL INSTRUCTIONAL MEDIA PROGRAMS. 90

CHAPTER I

OVERVIEW OF THE PROJECT

The problem considered in this project has been for some time a major concern of teacher education institutions, but little has been accomplished which contributes to its solution. With a constantly changing variety of available media for teaching and the emphasis placed on media by provisions of the National Defense Education Act, the problem is intensified.

A review of research reveals that some effort has been expended in considering whether a course or a unit in a methods course would provide appropriate pre-service teacher education emphasis on instructional media. Some effort has been made in status studies and in factors affecting teacher utilization of materials and equipment. Relatively little has been done which can serve as guidelines to teacher education institutions in providing appropriate pre-service experiences in the classroom use of instructional media. Some research to date, largely doctoral dissertations, have considered specific competencies needed by beginning teachers as a background for the effective selection and classroom use of instructional media. However, such research generally was not based on operating programs developed on specific methods for providing instruction and with appropriate materials, equipment, facilities, and staff necessary to provide a background in instructional media for beginning teachers.

Teacher education institutions today must find a way to provide experiences and information for beginning teachers which will equip them to utilize technological developments in instructional media. This has not been done in the past. Media such as the educational film has been available for many years, but any survey of utilization practices in an average situation generally reveals that the film is not being utilized to a fraction of its potential. The slowness of the schools to change instructional methods is obvious in considering the classroom use of other media. By the same token the hesitancy on the part of teacher education institutions to include in their programs appropriate emphases on media limits the capacity of their graduates to secure and to utilize a variety of instructional media in the classroom. In addition, little is generally taught by example. Faculties of teacher education institutions do not generally utilize a variety of instructional media in their teaching; appropriate facilities, staff, materials, and equipment do not generally exist for teacher education students; and the lack of up-to-date in-service programs in the public schools limits the possibility of securing the needed information and skill after graduation.

Rapid technological developments in instructional media today demand recognition to an extent which suggests revamping teacher education programs from three major standpoints: subject content must be up-dated; school organization must break with tradition; and use must be made of all media of mass communication for classroom instruction. It was the purpose of this project to explore the last of these three considerations.

OBJECTIVES

It was assumed as a basis for this project that certain experiences in instructional media could be isolated for purposes of teacher education, and that these experiences could be included in the teacher education program in a manner that effectiveness would be reflected in the appropriate classroom use by beginning teachers of available materials and equipment, such as motion picture films, filmstrips, slides, recordings, and radio and television programs.

The basic objective of the study was to ascertain what specific emphasis could be placed on the effective use of various types of instructional media during the teacher education program with the result that a difference would be made in the selection and utilization of these media in teaching. Facets of the project sought answers to the following questions.

What factors influence the effective use of instructional media in teaching?

Which of these factors should be considered in developing a pre-service teacher education program?

What specific competencies in the use of instructional media in teaching can be isolated for emphasis in the teacher education program?

How can these competencies be developed during pre-service teacher education?

To what extent will teaching for these competencies in pre-service education influence the selection and utilization of instructional media in in-service teaching?

PROCEDURES

Specific experiences with instructional media were isolated for inclusion in the pre-service program. These experiences were included in the existing program for general elementary and general secondary students. Actual conduct of the study involved the following steps:

Literature and research in this field were examined for a listing of information, skills, attitudes, competencies, and experiences considered basic to the adequate preparation of teachers in the use of instructional media. This list was used as the basis for studying the opinions of supervising teachers directly involved with the University of Georgia student teaching program. Information was obtained regarding the frequency of use of media, the degree information and skills possessed by supervising teachers, and the relative importance of such information and skill in the pre-service preparation of teachers. On the basis of the results of this phase of the study a selection was made of experiences, with their relative emphasis, to be included in the instructional phases of the project. Twenty hours of class instruction was included in courses in curriculum planning and teaching procedures. This organized instruction was coordinated with three months of laboratory work with instructional media, both equipment and materials, prior to a three-month student teaching field experience. An organized follow-up was conducted during the student teaching experience and various types of assistance with instructional media were made available.

During the second and third years of the project, along with continuing the instructional program, a follow-up study was conducted to determine practices in classroom use of instructional media. This follow-up also revealed some aspects of attitude toward the classroom use of instructional media and weaknesses regarding pre-service experiences in this area. This portion of the study involved two groups of teachers in Georgia's public schools: those who, as students on pre-service level, had received the training offered during the project; and those teachers who were graduated from the University of Georgia between 1956 and 1959 and received no organized emphasis on instructional media during their pre-service program. The teacher education programs of both groups were comparable except for this pre-service emphasis on instructional media.

Data were collected from representative schools of the State employing University of Georgia graduates as teachers. These data isolated general characteristics of the public schools in the State as they influence the use of instructional media in classroom teaching.

Surveys through questionnaire and interviews formed the bases for collecting data for the project. Data collected were punched on standard IBM cards and analyzed for central tendencies. A comparison was made in the classroom use of instructional media between the control group and the experimental group. Implications were drawn from these analyses for application to the teacher education program.

PREMISES

The project was developed on the basic assumption that a beginning teacher should know:

1. The nature of instructional materials and equipment.
2. How to secure, operate, and care for materials and equipment.
3. How to select appropriate materials for a specific purpose in teaching.
4. How to use materials effectively in a teaching situation.

In developing the project it was assumed that if competencies in teaching through the classroom use of mass media are developed during pre-service teacher education, then beginning teachers will use these media frequently and effectively in teaching. It was assumed further that pre-service teacher education should provide the beginning teacher with certain information and skills in the use of instructional media, and that the possession of this information and these skills will create in the beginning teacher an attitude favorable to the effective use of media in classroom teaching and will motivate use whenever needed and practicable.

It was expected that the competencies sought would result from the possession of certain information and skills. As a basis for the project the following were specifically emphasized during the professional courses in curriculum planning and teaching procedures.

COMPETENCIES

Information Provided:

1. The physical nature and characteristics of each type of material and equipment.

2. Sources of materials and equipment.

3. Classroom conditions (physical) which foster or limit the effective use of materials in teaching.

4. Methods of classifying, storing, maintaining, and circulating materials and equipment--especially as applicable to local administration and to state tape and film services.

5. The potentials of each type of material for use in teaching.

6. Selecting materials to correlate with the curriculum.

7. Results of research with implications for using materials in teaching.

8. Suggested procedures essential to effective utilization.

9. Evaluation of results accomplished through the use of materials.

Skills (as practical experience in applying the above information):

1. To recognize the material and equipment which will be appropriate for use in a given physical situation.

2. To appraise the technical quality of material and equipment.

3. In the operation of equipment.

4. In the simple maintenance of material and equipment as affecting use.

5. In arranging the best physical conditions for the use of equipment.

6. In the selection of appropriate materials for a specific teaching purpose.

7. To appraise the educational worth of material.

8. In the actual use of material and equipment in a classroom situation.

9. In evaluating the effectiveness of the use of materials in teaching.

Attitudes Sought:

1. An attitude favorable to the use of a variety of materials and techniques in teaching.

2. An attitude favorable toward the use of each medium in terms of its unique contribution to classroom teaching.

3. A belief that children can learn through the classroom use of various media of communication.

4. An inquisitiveness regarding the best material for a specific teaching purpose.

5. A belief that materials should be used effectively to accomplish the objectives of the curriculum and not as ends in themselves.

SCHEDULE

Activity I: Isolate competencies in classroom use of mass media.

Time: July 1, 1959 - December 31, 1959.

Method: Review of literature including research, opinions, practices reported by teacher education institutions.

Instrument: List of specific competencies to be taught in Curriculum Planning and Teaching Procedures.

Activity II: Authenticate competencies.

Time: January, 1960.

Method: Questionnaire to supervising teachers working with the University of Georgia student teaching program. Ascertain: (1) authority for selection of specific competencies to be taught, (2) background of supervising teachers in the classroom use of mass media, (3) influence of supervising teachers on student teachers in their use of media.

Instrument: Questionnaire.

Activity III: Isolate factors influencing local utilization.

Time: January, 1960 - June, 1960.

Method: Ascertain from principals of schools in which University of Georgia student teachers are placed what factors influence utilization of media under study. Project influence of these factors on plans for the project.

Instrument: Survey form.

Activity IV: Teach the experimental group for desired competencies.

Time: January, 1960 - June, 1960 and
September, 1960 - June, 1961.

Method: Use laboratory, lecture, demonstration, and discussion approach. Work with students both individually and as a class group, depending on activity involved. Standardize instruction for groups all quarters. Use checksheet on skills. Use all available materials in various presentations.

Instrument: Mimeographed handouts of pertinent information covered in the instructional phases of the project.

Activity V: Follow-up through student teaching.

Time: March, 1960 - June, 1960; September, 1960 - June, 1961;
September, 1961 - March, 1962.

Method: Use diary technique to record materials and equipment used during practice teaching by student teacher and supervising teacher. Ascertain (1) extent of use, (2) deterrents to use, (3) what could have been used and reason for non-use.

Instrument: Weekly diary form.

Activity VI: Locate control group.

Time: January, 1960 - June, 1960 and
September, 1960 - December, 1960.

Method: Locate general elementary and general secondary graduates of the University of Georgia, College of Education, who completed teacher education program after closing of demonstration school but prior to beginning of instruction phase of the project. Data secured from State Department of Education records on teacher certification, payroll records, and retirement records.

Instrument: Summary sheet.

Activity VII: Use made of instructional media in actual teaching by control and experimental groups.

Time: March, 1961 - March, 1962.

Method: Circulate questionnaire to all control and experimental subjects. Supplement with field interviews to extend response.

Instrument: Questionnaire and interview check sheet.

Activity VIII: Isolate implications for teacher education in instructional media in schools employing University of Georgia graduates.

Time: January, 1962 - March, 1962.

Method: Survey of representative public schools in Georgia for conditions affecting classroom use of instructional materials and equipment.

Instrument: Series of survey forms covering administration and utilization of instructional media.

Activity IX: Interpret data and report project.

Time: March, 1962 - September, 1962.

Method: Relate and interpret data collected during project. Develop implications for including competencies in instructional media during the pre-service teacher education program.

CHAPTER II

COMPETENCIES IN THE CLASSROOM USE OF INSTRUCTIONAL MEDIA

As a basis for the instructional phases of the project, competencies in the classroom use of instructional media were selected from professional opinion expressed in research and literature on teacher education. As stated in the introduction, these competencies included the possession of certain specific information and the development of certain specific skills by pre-service teacher education students. Competencies selected included basically those originally listed by Noel and Leonard in their publication Foundations for Teacher Education in Audio-Visual Instruction (American Council on Education, 1947). Few changes in this original list, of value to this study, were located in the literature reviewed. Those pertinent were incorporated in the competency list used in this study. Other changes in the original list were suggested by supervising teachers who participated.

As a guide to appropriate emphases before beginning the instructional program, opinions regarding the pertinence and adequacy of planned instruction for competencies were solicited from supervising teachers who had worked with the control group during their pre-service student teaching and would work with the experimental group during this same period. A form for this purpose was developed. This instrument was carried through three revisions to assure a method for securing a maximum of information in as objective a manner as possible and with as little writing as possible by the supervising teachers. Aside from testing the form with various groups, in the process of revision the content was discussed in organized meetings with supervising teachers participating and preparing to participate in the student teaching program.

Through this phase of the project the frequency with which supervising teachers used certain instructional media in classroom teaching, the competencies involved in the use of these media which supervising teachers believed they possessed, and their opinions regarding the importance of these competencies in the pre-service education of teachers were secured by questionnaire from 275 supervising teachers. In addition to these data, the following classifications were secured on each of the teachers who responded to the questionnaire: (1) teaching level, (2) number of teachers in the school in which he teaches, (3) length of service as a classroom teacher, (4) length of service as a supervising teacher, and (5) teaching area. All items of information were coded and punched into standard IBM cards.

Analyses of the questionnaire were made to determine if responses to the questionnaire differed according to the classification of data listed above. The per cent of teachers in the several categories who responded in various ways to the use, competencies, and emphasis sections of the questionnaire were computed. These per cents are listed in Tables 1 through 25. Since it was desired only to determine if certain trends existed, the significance of difference in per cents was not calculated for this phase of the study. Considerably more data were secured than are included in these tables. An effort was made to include sufficient data to suggest trends.

Tabulations in Tables 1 through 25 are expressed in percentages of 275 supervising teachers as follows:

By teaching level

	Number supervising teachers
Elementary	97
Secondary	154
Combinations not clearly defined	24

By size of school

Number of Teachers in the school	Number supervising teachers
4-12	22
13-25	97
26-50	84
Over 50	69
No information	3

By length of service as classroom teacher

Years experience as classroom teacher	Number supervising teachers
2-5	30
6-10	65
11-20	97
21-30	57
31 and over	24
No information	2

By length of service as a supervising teacher

Years experience as supervising teacher	Number supervising teachers
1-3	128
4-6	73
7 or more	74

By teaching area

	Number supervising teachers	
Elementary		97
Secondary		99
English	28	
Social Studies	35	
Science	17	
Math	15	
Foreign Language	4	
Combinations and other fields		79

TABLE 1

USE OF MEDIA BY SUPERVISING TEACHERS BY TEACHING LEVEL

MEDIUM	Used Frequently		Used Occasionally		Never Used	
	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary
Motion picture films	87	39	12	57	1	3
Filmstrips	57	14	41	64	1	21
Slides	6	8	58	53	32	38
Tape recordings	5	10	36	23	57	67
Phonograph records	76	19	21	39	3	40
Radio programs	18	6	42	40	40	53
Television programs	22	5	21	25	57	68

Table 1 shows the frequency with which elementary and secondary supervising teachers considered that they used in their teaching the types of instructional media included in the study. All types of media except tape recordings and slides were used more frequently by elementary than by secondary supervising teachers. A greater use by both groups was made of motion picture films than of any other medium. In general, frequency of use seems to be related to teaching level and a pattern of emphasis on certain types of media by level is suggested by Table 1. Frequency of use as indicated in Table 1 may also be related to the availability of materials in the public schools of Georgia. Extensive motion picture film and tape services are available; however, considerably more use is made of film than of tape service. At the time of this study educational television in Georgia was limited to three areas comprising only a portion of the school systems employing University of Georgia teacher education graduates. Educational radio in the State was limited to the Atlanta area except for public service time on commercial stations utilized by some systems throughout the State.

The information in Table 1 suggests relative emphases to be placed during the instructional and laboratory phases of the project on various types of media by level.

TABLE 2

USE OF MEDIA BY SUPERVISING TEACHERS BY SIZE OF SCHOOL

MEDIUM	Percentage of Supervising Teachers Reporting Frequent Use			
	4-12 Teacher Schools	13-25 Teacher Schools	26-50 Teacher Schools	Over 50 Teacher Schools
Motion picture films	86	73	49	38
Filmstrips	55	43	26	12
Slides	9	7	11	7
Tape recordings	0	7	8	14
Phonograph records	68	56	29	25
Radio programs	5	10	13	7
Television programs	9	15	8	7

A general decrease in the use of media in the larger schools is indicated in Table 2. Greatest use is made of motion picture films and phonograph records by supervising teachers in schools of all sizes. A decrease in the use of filmstrips and phonograph records suggests greater availability of these media in the smaller schools. Increased use of tape recordings with the increase in size of school reflects the emphasis on language teaching and the availability of language laboratories in the larger schools.

TABLE 3

USE OF MEDIA BY SUPERVISING TEACHERS BY LENGTH OF SERVICE IN CLASSROOM TEACHING

MEDIUM	Frequency of Use of Media by Number of Years of Teaching Experience				
	2-5 years	6-10 years	11-20 years	21-30 years	31 or more
Motion picture films	58	55	60	54	68
Filmstrips	19	18	34	42	36
Slides	6	9	7	9	12
Tape recordings	3	9	10	9	8
Phonograph records	35	43	41	44	36
Radio programs	10	6	8	12	20
Television programs	10	6	10	16	12

In Table 3 a trend toward more frequent use of projected media increases with the increase in number of years of classroom teaching experience. In other types of media there are no great differences in frequency of use considered in relation to years of experience. Table 3 suggests that the supervising teachers reporting in this study maintain somewhat of a pattern in their use of instructional media throughout their experience as classroom teachers.

TABLE 4 - USE OF MEDIA BY LENGTH OF SERVICE AS SUPERVISING TEACHERS

MEDIUM	Percentage of Supervising Teachers Reporting Frequent Use		
	1-3 Years Supervising Teacher	4-6 Years Supervising Teacher	Over 7 Years Supervising Teacher
Motion picture films	55	66	55
Filmstrips	24	38	34
Slides	7	10	9
Tape recordings	9	10	8
Phonograph records	39	45	41
Radio programs	9	15	5
Television programs	12	12	7

Table 4 shows that the greatest use of all types of media except educational television programs is made by the supervising teachers included in this study who have been supervising student teachers for a period of 4 to 6 years. Table 4 also repeats the trend evident in preceding tables of greatest use made of some types of media: motion picture films, filmstrips, and phonograph records

TABLE 5 - USE OF MEDIA BY SUPERVISING TEACHERS BY TEACHING AREA

MEDIUM	Teaching Area					
	Elementary	Secondary				
		English	Social Studies	Science	Math	Foreign Language
Motion picture films	91	43	59	65	7	0
Filmstrips	57	14	21	24	20	0
Slides	7	4	18	12	7	0
Tape recordings	6	7	9	6	0	75
Phonograph records	77	29	3	6	0	50
Radio	18	0	15	18	0	0
Television	22	0	15	18	0	0

Table 5 continues the trends evident in preceding tables. Elementary supervising teachers included in the study make considerably more use of media than do secondary teachers. Greatest use is made of motion picture films, phonograph records, and filmstrips. Somewhat of a pattern develops in Table 5 in the use of media by secondary supervising teachers. Science and social studies teachers use more motion picture films than do teachers in other areas. Foreign language teachers utilize tape recordings and phonograph records, but do not make frequent use of other types of media. Math teachers use filmstrips more than other media. Table 5 includes only the frequent use of media. Occasional and no use were considered too detailed for purposes of this report. At least occasional use was made by all supervising teachers of all types of media.

Tables 1-5 suggest relative emphasis on types of media which student teachers will find used most frequently by the public school teachers who will supervise their student teaching experiences.

Tables 6 through 15 indicate the competencies--information regarding instructional media and skill in their classroom use--which supervising teachers considered that they possessed. The types of information and skills were projected for emphasis in the pre-service instructional program.

It was felt at this point in developing the project that the types of information and skill possessed by supervising teachers would suggest: instruction and laboratory emphases for the instructional program, assistance which should be rendered supervising teachers during the project, and problems of the student teacher in dealing with the supervising teacher.

TABLE 6 - COMPETENCY OF SUPERVISING TEACHERS BY TEACHING LEVEL - INFORMATION

INFORMATION REGARDING:	Percentages of Supervising Teachers with Sufficient Information Each Category		
	Elementary	Secondary	Other
Physical characteristics of each type of material and equipment	32	38	29
Sources of each type of material and equipment	46	45	46
Classroom conditions (physical) which limit or foster the use of materials in teaching	76	56	54
Methods of classifying, storing, maintaining, and circulating materials and equipment	46	33	25
Potentials of each type of material for use in teaching	44	31	29
Selection of materials to correlate with the curriculum	76	49	63
Results of research studies which have implications for using materials in teaching	11	9	8
Specific procedures essential to effective utilization	52	30	38
Evaluation of results accomplished through the use of materials	52	29	29

Table 6 reveals that on an average secondary teachers included in the study feel that they possess less information regarding instructional media than do elementary teachers. Highest competency is felt in the selection of materials for use and in arranging classroom conditions which foster utilization. Least competency is felt in a knowledge of research in instructional media. Little competency is felt in a knowledge of the physical nature of materials and equipment. Average competency is felt in sources of materials and equipment, administration affecting classroom utilization, potentialities of media, utilization, and evaluation.

TABLE 7 - COMPETENCY OF SUPERVISING TEACHERS BY TEACHING LEVEL - SKILL

SKILL	Percentage of Supervising Teachers with Sufficient Skill each Category		
	Elementary	Secondary	Other
To recognize the material and equipment which will be appropriate for use in a given physical situation	58	50	54
To appraise the technical quality of material and equipment	25	25	21
In the operation of equipment	66	47	58
In the simple maintenance of material and equipment	47	27	38
In arranging the best physical condition for the use of equipment	69	44	46
In the selection of appropriate materials for specific teaching purposes	73	59	46
To appraise the educational worth of material	61	47	50
In the actual use of material and equipment in a classroom situation	68	48	54
In evaluating the effectiveness of the use of materials in teaching	52	40	42

Table 7 reveals a higher degree of skill by elementary than by secondary supervising teachers in all categories listed. Least skill is felt by both groups in appraising the technical quality and in the maintenance of materials and equipment. Both elementary and secondary supervising teachers felt that their highest skill was in selecting appropriate materials for specific teaching purposes. Again, somewhat of a pattern is suggested in Table 7. Higher skill would probably be expected in the operation of equipment by elementary than secondary supervising teachers. Less skill would probably be expected of secondary teachers in all categories since Tables 1-5 reveal less frequent use of media on secondary level.

TABLE 8 - COMPETENCY OF SUPERVISING TEACHERS BY SIZE OF SCHOOL - INFORMATION

INFORMATION REGARDING:	Percentages of Supervising Teachers with Sufficient Information--Size of School by Number of Teachers			
	4-12	13-25	26-50	Over 50
Physical characteristics of each type of material and equipment	32	33	42	30
Sources of each type of material and equipment	50	46	49	39
Classroom conditions (physical) which limit or foster the use of materials in teaching	73	67	57	59
Methods of classifying, storing, maintaining, and circulating materials and equipment	36	47	32	29
Potentials of each type of material for use in teaching	36	43	31	32
Selection of materials to correlate with the curriculum	73	71	58	41
Results of research studies which have implications for using materials in teaching	23	5	10	13
Specific procedures essential to effective utilization	36	48	36	26
Evaluation of results accomplished through the use of materials	55	43	31	29

TABLE 9 - COMPETENCY OF SUPERVISING TEACHERS BY SIZE OF SCHOOL - SKILL

SKILL	Percentages of Supervising Teachers with Sufficient Skill--Size of School by Number of Teachers			
	4-12	13-25	26-50	Over 50
To recognize the material and equipment which will be appropriate for use in a given physical situation	55	54	50	54
To appraise the technical quality of material and equipment	23	27	21	25
In the operation of equipment	50	68	57	36
In the simple maintenance of material and equipment	32	53	24	23
In arranging the best physical conditions for the use of equipment	55	64	44	45
In the selection of appropriate materials for specific teaching purposes	64	75	58	51

TABLE 9 (Continued)

SKILL	Percentages of Supervising Teachers with Sufficient Skill--Size of School by Number of Teachers			
	4-12	13-25	26-50	Over 50
To appraise the educational worth of material	59	55	49	48
In the actual use of material and equipment in a classroom situation	59	68	49	45
In evaluating the effectiveness of the use of materials in teaching	55	48	38	42

Tables 8 and 9 reveal a tendency toward less competence regarding instructional media by supervising teachers in larger schools. In fact, on an average the highest competency is recognized in most categories listed by supervising teachers in schools of 13 to 25 teachers. Highest competency, in both information and skill, was felt in the selection of materials and least in a knowledge of research and in the skill to appraise the technical quality of materials and equipment.

TABLE 10 - COMPETENCY OF SUPERVISING TEACHERS BY YEARS OF EXPERIENCE IN CLASSROOM TEACHING - INFORMATION

INFORMATION REGARDING:	Percentages of Supervising Teachers with Sufficient Information--Years of Classroom Experience				
	2-5	6-10	11-20	21-30	31 or more
Physical characteristics of each type of material and equipment	26	43	39	32	16
Sources of each type of material and equipment	35	54	47	44	39
Classroom conditions (physical) which limit or foster the use of materials in teaching	55	58	72	54	68
Methods of classifying, storing, maintaining, and circulating materials and equipment	26	38	40	39	32
Potentials of each type of material for use in teaching	23	29	45	33	36
Selection of materials to correlate with the curriculum	58	49	70	51	68
Results of research studies which have implications for using materials in teaching	13	6	10	14	4
Specific procedures essential to effective utilization	35	28	42	42	44
Evaluation of results accomplished through the use of materials	26	31	45	33	44

TABLE 11 - COMPETENCY OF SUPERVISING TEACHERS BY YEARS OF EXPERIENCE IN CLASSROOM TEACHING - SKILL

	Percentages of Supervising Teachers with Sufficient Skill--Years of Classroom Experience				
	2-5	6-10	11-20	21-30	31 or more
To recognize the material and equipment which will be appropriate for use in a given physical situation	39	55	63	39	60
To appraise the technical quality of material and equipment	29	28	28	14	20
In the operation of equipment	48	69	54	56	28
In the simple maintenance of material and equipment	42	38	39	28	20
In arranging the best physical condition for the use of equipment	45	60	58	44	44
In the selection of appropriate materials for specific teaching purposes	52	63	69	60	60
To appraise the educational worth of material	42	48	61	51	44
In the actual use of material and equipment in a classroom situation	45	63	59	49	52
In evaluating the effectiveness of the use of materials in teaching	42	38	53	39	44

Tables 10 and 11 indicate that supervising teachers with 11-20 years of classroom teaching experience considered that they had more information and skill in the use of instructional media than those of any other experience group. Supervising teachers with 2 to 5 years' teaching experience considered themselves least competent. Little difference was noted in most areas by teachers with over 20 years' classroom experience. All experience groups considered that they had most information concerning the creation of classroom conditions favorable to the use of media and the selection of appropriate materials to correlate with the curriculum. All groups recognized that they had little information regarding the results of research in instructional media. In regard to skills, the members of all groups considered themselves most competent in selecting appropriate materials and least competent in appraising the technical quality of materials and equipment.

TABLE 12 - COMPETENCY OF SUPERVISING TEACHERS BY YEARS IN SUPERVISION - INFORMATION

INFORMATION REGARDING:	Percentages of Supervising Teachers with Sufficient Information--Years in Supervision		
	1-3	4-6	7 or more
Physical characteristics of each type of material and equipment	32	36	39
Sources of each type of material and equipment	45	51	43
Classroom conditions (physical) which limit or foster the use of materials in teaching	59	71	61
Methods of classifying, storing, maintaining, and circulating materials and equipment	37	32	43
Potentials of each type of material for use in teaching	31	36	43
Selection of materials to correlate with the curriculum	55	58	69
Results of research studies which have implications for using materials in teaching	10	7	12
Specific procedures essential to effective utilization	31	37	51
Evaluation of results accomplished through the use of materials	34	34	46

TABLE 13 - COMPETENCY OF SUPERVISING TEACHERS BY YEARS IN SUPERVISION - SKILL

SKILL	Percentages of Supervising Teachers with Sufficient Skill--Years in Supervision		
	1-3	4-6	7 or more
To recognize the material and equipment which will be appropriate for use in a given physical situation	49	55	58
To appraise the technical quality of material and equipment	22	26	27
In the operation of equipment	52	60	54
In the simple maintenance of material and equipment	37	30	38
In arranging the best physical conditions for the use of equipment	54	55	49
In the selection of appropriate materials for specific teaching purposes	60	66	65
To appraise the educational worth of material	48	59	51

TABLE 13 (Continued)

SKILL	Percentages of Supervising Teachers with Sufficient Skill--Years of Supervision		
	1-3	4-6	7 or more
In the actual use of material and equipment in a classroom situation	50	62	59
In evaluating the effectiveness of the use of materials in teaching	39	53	45

Table 12 reveals that teachers who had been in supervision for 7 or more years felt that they had more information regarding instructional media than did teachers with less experience in supervision. However, Table 13 indicates teachers who had been in supervision for 4-6 years felt that they possessed a higher degree of skill in the use of instructional media than did teachers who had been in supervision for a shorter or a longer period.

In considering competencies in the use of instructional media possesssed by supervising teachers in relation to the length of their experience in supervision, teachers felt that they had considerable information in creating favorable classroom conditions for the use of media but little information regarding research; and that they had a high degree of skill in selecting appropriate instructional media and little skill in appraising the technical quality of these media.

TABLE 14 - COMPETENCY OF SUPERVISING TEACHERS BY SUBJECT TAUGHT - INFORMATION

INFORMATION REGARDING:	Percentage of Supervising Teachers with Sufficient Information					
	Elementary	Secondary				
		English	Social Studies	Science	Math	Foreign* Language
Physical characteristics of each type of material and equipment	31	21	32	41	13	50
Sources of each type of material and equipment	46	43	44	47	27	50
Classroom conditions (physical) which limit or foster the use of materials in teaching	76	57	62	65	27	50
Methods of classifying, storing, maintaining and circulating materials and equipment	47	18	38	29	7	25
Potentials of each type of material for use in teaching	43	29	35	41	7	25
Selection of materials to correlate with the curriculum	79	57	65	53	20	25

TABLE 14 (Continued)

INFORMATION REGARDING:	Percentage of Supervising Teachers with Sufficient Information					
	Elementary	Secondary				
		English	Social Studies	Science	Math	Foreign* Language
Results of research studies which have implications for using materials in teaching	12	11	12	6	7	0
Specific procedures essential to effective utilization	53	32	38	35	0	0
Evaluation of results accomplished through the use of materials	53	21	41	35	0	0

*Since only 4 modern language supervising teachers were included in the study, percentages have not been considered in analyzing this table for trends.

TABLE 15 - COMPETENCY OF SUPERVISING TEACHERS BY SUBJECTS TAUGHT - SKILL

INFORMATION REGARDING:	Percentage of Supervising Teachers with Sufficient Skill					
	Elementary	Secondary				
		English	Social Studies	Science	Math	Foreign* Language
To recognize the material and equipment which will be appropriate for use in a given physical situation	58	36	59	59	33	50
To appraise the technical quality of material and equipment	25	14	21	18	20	0
In the operation of equipment	66	25	56	65	40	25
In the simple maintenance of material and equipment	47	7	35	24	13	0
In arranging the best physical condition for the use of equipment	69	29	50	53	27	50
In the selection of appropriate materials for specific teaching purposes	73	54	76	73	13	25
To appraise the educational worth of material	61	43	65	53	13	0
In the actual use of material and equipment in a classroom situation	67	32	59	71	13	50
In evaluating the effectiveness of the use of materials in teaching	52	29	56	41	13	0

*Since only 4 modern language supervising teachers were included in the study, percentages have not been considered in an analysis for trends.

Tables 14 and 15 reveal that elementary supervising teachers considered that they had a higher degree of competency in instructional media than did secondary teachers. In the secondary group, most information was possessed by social science, science, and English teachers; and least by math teachers. Most skill was possessed by social science and science teachers on secondary level, and least skill by English and math teachers. Specifically, both elementary and secondary teachers felt that they had most information in creating classroom conditions favorable to the use of instructional media and least in the implications of research for the use of media. Both elementary and secondary teachers considered that they had most skill in the selection of appropriate materials and least skill in appraising the technical worth of materials and equipment.

TABLE 16 - OPINION OF SUPERVISING TEACHERS BY TEACHING LEVEL REGARDING EMPHASES ON COMPETENCIES DURING PRE-SERVICE TEACHER EDUCATION - INFORMATION

INFORMATION REGARDING:	Percentage of Supervising Teachers Suggesting Emphases Each Category		
	Elementary	Secondary	Others
Physical characteristics of each type of material and equipment	19	22	25
Sources of each type of material and equipment	44	59	58
Classroom conditions (physical) which limit or foster the use of materials in teaching	76	62	63
Methods of classifying, storing, maintaining, and circulating materials and equipment	61	47	54
Potentials of each type of material for use in teaching	86	79	83
Selection of materials to correlate with the curriculum	94	83	96
Results of research studies which have implications for using materials in teaching	31	38	38
Specific procedures essential to effective utilization	85	74	67
Evaluation of results accomplished through the use of materials	80	69	79

Table 16 indicates that supervising teachers, when considered by teaching level, are generally agreed that most emphasis on information on instructional media provided during pre-service education should be placed on the selection of materials, on the potentialities of each type of medium for use in teaching, and on specific procedures essential to effective utilization. They seemed to be of the opinion that least emphasis should be placed on the physical characteristics of equipment and material and on research studies which have implications for the use of materials.

TABLE 17 - OPINION OF SUPERVISING TEACHERS BY TEACHING LEVEL REGARDING EMPHASES ON COMPETENCIES DURING PRE-SERVICE TEACHER EDUCATION - SKILL

SKILL	Percentage of Supervising Teachers Suggesting Emphases each Category		
	Elementary	Secondary	Others
To recognize the material and equipment which will be appropriate for use in a given physical situation	80	71	71
To appraise the technical quality of material and equipment	27	36	29
In the operation of equipment	87	70	88
In the simple maintenance of materials and equipment	58	52	58
In arranging the best physical conditions for the use of equipment	78	65	58
In the selection of appropriate materials for specific teaching purposes	96	88	83
To appraise the educational worth of material	90	80	67
In the actual use of material and equipment in a classroom situation	97	81	88
In evaluating the effectiveness of the use of materials in teaching	86	77	83

Table 17 indicates that in the matter of skills developed during pre-service teacher education supervising teachers seemed to be of the opinion that greatest emphases should be placed on the selection of appropriate materials and on the actual use of materials in a classroom situation. They suggested least emphasis on appraising the technical quality of materials and equipment. No differences of importance are noted when considering opinions on either information or skill by elementary or secondary supervising teachers. Somewhat of the same pattern of emphasis begins to emerge in Tables 16 and 17 as was found in preceding tables dealing with information and skills which supervising teachers themselves possessed. In general supervising teachers tended to consider these items of information and the skills in the use of instructional media which they possessed as most deserving of emphasis in the pre-service education of teachers. By the same token they tended to minimize the importance of pre-service education of those phases of the program in which they were least competent.

TABLE 18 - OPINION OF SUPERVISING TEACHERS BY SIZE OF SCHOOL REGARDING EMPHASES ON COMPETENCIES DURING PRE-SERVICE TEACHER EDUCATION - INFORMATION

INFORMATION REGARDING:	Percentages of Supervising Teachers Suggesting Emphasis Each Category			
	Number of Teachers in School			
	4-12	13-25	26-50	Over 50
Physical characteristics of each type of material and equipment	23	18	24	23
Sources of each type of material and equipment	64	55	56	46
Classroom conditions (physical) which limit or foster the use of materials in teaching	68	72	70	58
Methods of classifying, storing, maintaining, and circulating materials and equipment	59	62	51	39
Potentials of each type of material for use in teaching	77	86	82	77
Selection of materials to correlate with the curriculum	86	92	90	80
Results of research studies which have implications for using materials in teaching	32	31	35	44
Specific procedures essential to effective utilization	77	79	76	75
Evaluation of results accomplished through the use of materials	77	75	70	74

TABLE 19 - OPINION OF SUPERVISING TEACHERS BY SIZE OF SCHOOL REGARDING EMPHASES ON COMPETENCIES DURING PRE-SERVICE TEACHER EDUCATION - SKILL

SKILL	Percentages of Supervising Teachers Suggesting Emphasis Each Category			
	Number of Teachers in School			
	4-12	13-25	26-50	Over 50
To recognize the material and equipment which will be appropriate for use in a given physical situation	86	76	79	65
To appraise the technical quality of material and equipment	18	34	40	25
In the operation of equipment	91	87	79	59
In the simple maintenance of material and equipment	50	59	58	45
In arranging the best physical conditions for the use of equipment	82	72	69	61
In the selection of appropriate materials for specific teaching purposes	91	94	94	83

TABLE 19 (Continued)

SKILL	Percentage of Supervising Teachers Suggesting Emphasis Each Category Number of Teachers in School 4-12	13-25	26-50	Over 50
To appraise the educational worth of material	86	89	81	74
In the actual use of material and equipment in a classroom situation	100	91	89	77
In evaluating the effectiveness of the use of materials in teaching	86	82	80	78

Table 18 reveals that supervising teachers regardless of size of the school in which they teach suggest that pre-service teacher education in instructional media should emphasize the selection of materials to correlate with the curriculum and the potentials of each type of material in teaching. Lowest emphasis is suggested on the results of research and on the physical characteristics of materials and equipment. Highest emphasis, according to Table 19, should be placed on the skill to use materials and equipment in the classroom, and least emphasis should be placed on appraising the technical quality of material and equipment. Approximately the same relative emphasis on information and skill is suggested by all groups when considered in relation to size of the schools in which they teach. The only item in which a considerable difference of opinion by size of school is indicated is in the skill to operate equipment. The larger the school the less emphasis supervising teachers feel should be placed on this phase of pre-service teacher education.

TABLE 20 - OPINION OF SUPERVISING TEACHERS BY NUMBER OF YEARS IN CLASSROOM TEACHING REGARDING EMPHASES ON COMPETENCIES DURING PRE-SERVICE TEACHER EDUCATION - INFORMATION

INFORMATION REGARDING:	Percentage of Supervising Teachers Suggesting Emphasis Each Category Number Years Classroom Experience 2-5	6-10	11-20	21-30	Over 30
Physical characteristics of each type of material and equipment	16	22	25	16	24
Sources of each type of material and equipment	55	63	48	51	56
Classroom conditions (physical) which limit or foster the use of materials in teaching	71	60	69	65	80
Methods of classifying, storing, maintaining, and circulating materials and equipment	45	58	52	49	56

TABLE 20 (Continued)

INFORMATION REGARDING:	Percentage of Supervising Teachers Suggesting Emphasis Each Category				
	Number Years Classroom Experience				
	2-5	6-10	11-20	21-30	Over 30
Potentials of each type of material for use in teaching	84	83	86	72	84
Selection of materials to correlate with the curriculum	77	88	92	86	92
Results of research studies which have implications for using materials in teaching	32	23	38	39	52
Specific procedures essential to effective utilization	74	72	79	74	92
Evaluation of results accomplished through the use of materials	68	68	74	81	80

TABLE 21 - OPINION OF SUPERVISING TEACHERS BY NUMBER OF YEARS IN CLASSROOM TEACHING REGARDING EMPHASES ON COMPETENCIES DURING PRE-SERVICE TEACHER EDUCATION - SKILL

SKILL	Percentage of Supervising Teachers Suggesting Emphasis Each Category				
	Number Years Classroom Experience				
	2-5	6-10	11-20	21-30	Over 30
To recognize the material and equipment which will be appropriate for use in a given physical situation	77	62	79	74	88
To appraise the technical quality of material and equipment	35	31	36	25	32
In the operation of equipment	71	75	80	75	84
In the simple maintenance of material and equipment	55	51	59	54	48
In arranging the best physical conditions for the use of equipment	61	68	71	70	72
In the selection of appropriate materials for specific teaching purposes	87	86	94	93	88
To appraise the educational worth of material	87	77	80	84	92
In the actual use of material and equipment in a classroom situation	81	85	93	84	88
In evaluating the effectiveness of the use of materials in teaching	74	77	86	75	92

In Tables 20 and 21 little difference is suggested in relative emphases of phases of pre-service instruction by supervising teachers when considered in relation to number of years in supervision. Relatively high emphasis in information is again suggested for the selection of materials to correlate with the curriculum and for the potentials of each type of materials in teaching; and little emphasis is suggested for research studies and the physical characteristics of material and equipment. Highest emphasis on skill is suggested for selecting appropriate materials for specific teaching purposes and on the appraisal of the educational worth of material, and least emphasis on skill is suggested for the appraisal of the technical worth of materials and equipment. A tendency is noted in Tables 20 and 21 for teachers who had been in service for a longer period to place more emphasis on the physical aspects of materials and equipment.

TABLE 22 - OPINION OF SUPERVISING TEACHERS BY NUMBER OF YEARS IN SUPERVISION REGARDING EMPHASES ON COMPETENCIES DURING PRE-SERVICE TEACHER EDUCATION - INFORMATION

INFORMATION REGARDING:	Percentage of Supervising Teachers Suggesting Emphasis Each Category		
	Number Years in Supervision		
	1-3	4-6	7 or more
Physical characteristics of each type of material and equipment	23	18	20
Sources of each type of material and equipment	54	52	55
Classroom conditions (physical) which limit or foster the use of materials in teaching	66	73	65
Methods of classifying, storing, maintaining, and circulating materials and equipment	52	52	53
Potentials of each type of material for use in teaching	83	82	80
Selection of materials to correlate with the curriculum	87	92	86
Results of research studies which have implications for using materials in teaching	34	32	41
Specific procedures essential to effective utilization	74	79	80
Evaluation of results accomplished through the use of materials	70	74	80

TABLE 23 - OPINION OF SUPERVISING TEACHERS BY NUMBER OF YEARS IN SUPERVISION REGARDING EMPHASES ON COMPETENCIES DURING PRE-SERVICE TEACHER EDUCATION - SKILL

SKILL	Percentage of Supervising Teachers Suggesting Emphasis Each Category		
	Number Years in Supervision		
	1-3	4-6	7 or more
To recognize the material and equipment which will be appropriate for use in a given physical situation	73	74	77
To appraise the technical quality of material and equipment	32	34	30
In the operation of equipment	75	79	80
In the simple maintenance of material and equipment	53	56	55
In arranging the best physical conditions for the use of equipment	68	66	74
In the selection of appropriate materials for specific teaching purposes	90	92	91
To appraise the educational worth of material	83	82	81
In the actual use of material and equipment in a classroom situation	88	85	89
In evaluating the effectiveness of the use of materials in teaching	80	79	84

Tables 22 and 23 reveal the same general pattern of relative emphasis as was found in preceding tables. Suggested emphasis within specific categories do not seem to vary markedly by number of years in supervision.

TABLE 24 - OPINION OF SUPERVISING TEACHERS BY SUBJECT AREA REGARDING EMPHASES ON COMPETENCIES DURING PRE-SERVICE TEACHER EDUCATION - INFORMATION

INFORMATION REGARDING:	Percentages of Supervising Teachers Suggesting Emphasis Each Category					
	Elementary	Secondary				
		English	Social Studies	Science	Math	Foreign Language
Physical characteristics of each type of material and equipment	19	4	12	18	27	25
Sources of each type of material and equipment	44	50	50	35	67	25
Classroom conditions (physical) which limit or foster the use of materials in teaching	75	61	68	47	47	75

TABLE 24 (Continued)

INFORMATION REGARDING:	Percentages of Supervising Teachers Suggesting Emphasis Each Category					
	Elementary	Secondary				
		English	Social Studies	Science	Math	Foreign Language
Methods of classifying, storing, maintaining, and circulating materials and equipment	61	25	41	41	40	50
Potentials of each type of material for use in teaching	84	71	68	76	87	100
Selection of materials to correlate with the curriculum	93	82	74	88	80	100
Results of research studies which have implications for using materials in teaching	28	32	32	47	53	50
Specific procedures essential to effective utilization	83	86	71	65	80	75
Evaluation of results accomplished through the use of materials	81	75	65	65	73	100

TABLE 25 - OPINION OF SUPERVISING TEACHERS BY SUBJECT AREA REGARDING EMPHASES ON COMPETENCIES DURING PRE-SERVICE TEACHER EDUCATION - SKILL

SKILL	Percentages of Supervising Teachers Suggesting Emphasis Each Category					
	Elementary	Secondary				
		English	Social Studies	Science	Math	Foreign Language
To recognize the material and equipment which will be appropriate for use in a given physical situation	82	64	71	76	87	50
To appraise the technical quality of material and equipment	26	25	24	41	40	25
In the operation of equipment	88	75	71	76	73	50
In the simple maintenance of material and equipment	60	54	41	71	60	50
In arranging the best physical conditions for the use of equipment	79	61	56	76	80	50
In the selection of appropriate materials for specific teaching purposes	95	86	85	88	80	100
To appraise the educational worth of material	89	86	68	76	80	100
In the actual use of material and equipment in a classroom situation	98	86	74	88	80	75
In evaluating the effectiveness of the use of materials in teaching	85	84	75	88	73	100

The only trends apparent in Tables 24 and 25 are those already noted in previous tables. No implications are apparent in these tables which suggest that supervising teachers in various subject areas differ in their opinions regarding what emphasis during pre-service teacher education should be given the various competencies in the use of the instructional media which are being considered in the project.

From Tables 1-5 the following points were isolated as important to the relative emphasis given various phases of the instructional program and as guidelines in conducting a follow-up of pre-service students during their student teaching experience.

Elementary supervising teachers utilize the types of media considered in the project more frequently than do secondary teachers.

The larger the school the less frequently are media used by supervising teachers.

The longer the supervising teacher has been in classroom teaching the more frequently are projected materials used for classroom instruction. In other types of media little relationship seems to exist between frequency of use and number of years of teaching experience.

The greatest use of media is made by teachers with 4 to 6 years of experience in supervising student teachers.

A pattern as to type of media most frequently used by supervising teachers in certain subject fields is evident.

Tables 6-15 suggest the following order of competencies possessed by supervising teachers who participated in this study:

Information

High	Creating physical conditions in classroom which limit or foster use of instructional media in teaching.
	Selection of materials to correlate with the curriculum.
Average	Sources of materials and equipment.
	Evaluation of results of use of media.
	Physical nature of materials and equipment.
	Methods of classifying, storing, maintaining, and circulating materials and equipment.

Potentials of use for each type of media.

Specific procedures for effective utilization.

Low — Results of research studies which have implications for using materials in teaching.

Skills

High — Skill to select appropriate material for a specific teaching purpose.

Average — Skill to recognize material and equipment which will be appropriate for use in a given physical situation.

Skill to operate equipment.

Skill in arranging best physical conditions for the use of equipment.

Skill to appraise the educational worth of material.

Skill in the actual use of material in a classroom situation.

Skill in evaluating the effectiveness of the use of material.

Low — Skill to appraise the technical quality of material and equipment.

Skill in the simple maintenance of material and equipment.

Tables 16-25 suggest the following order of emphasis on instructional media during pre-service teacher education by the supervising teachers who participated in this study:

Information

High — Selection of materials to correlate with the curriculum.

Potentials of each type of material for use in teaching.

Average — Specific procedures essential to effective utilization

Evaluation of results accomplished through the use of materials.

Classroom conditions (physical) which limit or foster the use of materials in teaching.

Sources of materials and equipment.

Methods of classifying, storing, maintaining, and circulating materials and equipment.

Low

Results of research studies which have implications for using materials in teaching.

Physical nature of each type of material and equipment.

Skills

High

Skill in the selection of appropriate materials for specific teaching purposes.

Skill in the actual use of material and equipment in a classroom situation.

Average

Skill to appraise the educational worth of material.

Skill in evaluating the effectiveness of the use of materials in teaching.

Skill in the operation of equipment.

Skill to recognize the material and equipment appropriate for use in a given physical situation.

Skill in arranging the best physical conditions for the use of equipment.

Low

Skill in the simple maintenance of materials and equipment.

Skill to appraise the technical quality of material and equipment.

CHAPTER III

DEVELOPING COMPETENCIES DURING THE PRE-SERVICE TEACHER EDUCATION PROGRAM

An organized program of instruction and laboratory experiences in instructional media was developed for the project with instruction including 10 two-hour sessions, spaced appropriately throughout the quarter, and with unlimited laboratory assistance available throughout the quarter preceding student teaching. Class instruction involved only those activities which could be handled on a group basis largely through lecture and demonstration techniques. Maximum use was made during these sessions of all available materials relating to the classroom use of the media being studied. Content of the 10 two-hour instructional sessions included:

1. General orientation to the project--Mass Communication and Classroom Instruction
2. Physical nature, sources, and costs of materials and equipment
3. Classroom conditions which foster utilization of media in teaching
4. Methods of classifying, storing, maintaining, and circulating materials and equipment as they affect availability and use by the classroom teacher
5. Potentials of various types of materials and equipment for classroom teaching
6. Selecting instructional media to correlate with the curriculum
7. Research studies with implications for using mass media in teaching
8. Specific procedures which may be helpful in the effective classroom utilization of instructional media
9. Evaluating the results accomplished through the use of media
10. Review and evaluation of the project.

Laboratory sessions were conducted with appropriate equipment representative of that available during student teaching and in the schools employing University of Georgia graduates. Graduate assistants were on duty during all laboratory sessions. All help with materials and equipment during laboratory sessions was rendered on an individual basis. All students were required to demonstrate proficiency in the operation of equipment required for the classroom use of the materials emphasized during the project. During laboratory periods materials were previewed and evaluated which would later be used in student teaching. Much consultative assistance was given during laboratory sessions in materials to be included in instructional units required prior to the student teaching experience. In most instances these units were later taught during student teaching.

Close liaison was maintained with the experimental group while they were engaged in the 12-week student teaching experience. During the first week of student teaching each student ascertained and reported on what equipment would be available to him in teaching and what conditions of use would prevail. During subsequent weeks a report was made each week by each student teacher indicating what instructional media he used, what media he observed being used by his supervising teacher, and what deterred the use of other media which he thought would have been effective.

On return from the student teaching experience the students were asked to evaluate the instructional program presented under the project in the light of their experiences in student teaching. The following is a compilation of suggestions made by members of a representative class of the experimental group after student teaching in answer to specific questions regarding the instructional phases of the project. Frequency of response is indicated in the column at the left.

Elementary Student Teachers

What other areas do you think should be added to the instructional media program?

38	No additional areas suggested
16	More lab time for preparation of materials (stencils, posters, flat pictures), previewing filmstrips
3	More experience in ordering films
1	More time for TV

What changes in time, facilities, methods of teaching would you like to see made?

28	More lab time, student participation in preparation of materials
11	No changes suggested
9	AV should be a required course for teachers
5	Change lab schedule
4	More lab assistants needed
3	Total time for course should be increased
3	Better room conditions (acoustics, ventilation)
1	Use more materials
1	Include field trips

Now that you have completed your student teaching, what is your general reaction to the instructional media program?

48 Helpful, practical value, important for beginning teacher
8 Gained confidence in use of equipment and the selection of materials
2 Method of presentation satisfactory
2 Large amount of material covered in short time

Secondary Student Teachers

What other areas do you think should be added to the instructional media program?

18 No additional areas suggested
12 Additional lab time for previewing and assembling materials
3 Use of microprojector
2 Duplicating processes, mimeographing, etc.
2 More demonstration time

What changes in time, facilities, methods of teaching would you like to see made?

25 Should be more closely correlated with curriculum and teaching procedures courses
25 More lab time needed
10 Divide into subject area groups
4 More time for instruction
4 Periods should be broken
3 Latter part of course should be devoted to preparation of materials for unit
2 Need syllabus of hand-out materials
2 Room conditions poor (acoustics, ventilation)
1 Time sufficient

Now that you have completed your student teaching, what is your general reaction to the instructional media program?

23 Course helpful, valuable
13 Course practical
8 More lab, less lecture
7 Gained better understanding of value of instructional materials
5 Gained confidence in using equipment and materials

An effort was made through a follow-up of students into their first years of teaching to ascertain some of the influences which the instructional program may have had on their use of media in regular classroom teaching. Those students who had received instruction and had subsequently completed the student teaching field experience comprised the experimental group. Table 26 describes the population of this group.

TABLE 26 - POPULATION--EXPERIMENTAL GROUP

	Elementary	Secondary	Total
Received instruction under the project--January 1, 1960-June 30, 1961	171	172	343
Follow-up conducted through student teaching - September 1, 1960-December 31, 1961	162	139	301
Received instruction but did not register for student teaching	9	33	42
Follow-up of Experimental Group:			
Teaching in Georgia as of April, 1962	68	65	133
Certified in Georgia but not teaching in Georgia	43	30	73
Not certified in Georgia	60	77	137

Students who received instruction under the project but did not register for student teaching included largely liberal arts majors not registered in the College of Education.

The follow-up of members of the experimental group revealed several interesting facts:

> 206 of 301 (68%) of the students trained during this study applied for certification in Georgia. This represents a loss of almost one-third.
>
> 133 of 301 (44%) actually accepted teaching positions in Georgia during the first year following graduation. During the period covered by this project, 56% of the general elementary and general secondary graduates of the College of Education did not accept employment in the State.

Former students of the College of Education who were graduated by the University of Georgia under a pre-service teacher education program comparable to that of the experimental group except for the instruction involved in the project comprised the control group. Table 27 describes the population of this group.

TABLE 27 - POPULATION--CONTROL GROUP

	Elementary	Secondary	Total
General Elementary and General Secondary trained under the program (including student teaching) September, 1956 - December 31, 1959	417	421	838
Follow-up of Control Group:			
Teaching in Georgia as of April, 1962	178	135	313
Certified in Georgia, but not teaching in Georgia	137	124	261
Not certified in Georgia	76	106	182
Teacher education program incomplete	3	9	12
Attrition due to change of residence or death	23	47	70

574 of 838 (68%) were certified to teach in Georgia. This is the same percentage found for the experimental group.

313 of 838 (37%) were teaching in Georgia two to five years after graduation. Of the experimental group 44% accepted teaching positions in Georgia during the first year after graduation. This represents a further loss to the State of an additional 7% within two to five years following graduation.

Questionnaires dealing with various aspects of classroom utilization of instructional media were circulated to both the experimental and the control subjects. Table 28 indicates the extent of circulation and the returns from these questionnaires.

TABLE 28 - QUESTIONNAIRE RETURNS--EXPERIMENTAL AND CONTROL GROUPS

	Elementary	Secondary	Total
Experimental Group			
Circularized	68	65	133
Questionnaires Returned	52	55	107
Loss	16	10	26
Questionnaires used in this Report	50	53	103
Control Group			
Circularized	178	135	313
Questionnaires Returned	133	86	219
Loss	45	49	94
Questionnaires used in this Report	133	86	219

Tables in this report are based on an 80% return from experimental subjects and a 70% return from control subjects. Four questionnaires returned by experimental subjects, two elementary and two secondary, were received too late to be included in the tabulations. Their inclusion would not influence the implications of these tabulations.

Questionnaire returns provided the data on which Tables 29 through 50 are based. It was the purpose of the questionnaire to ascertain in what ways organized instruction and unlimited laboratory experiences would influence the classroom use of instructional media. Upon examination of the questionnaires returned by the control group it was evident that all but 37 of the 219 respondents had secured through post-graduate study of one type or another some organized training in the classroom use of instructional media. Consequently, in analyzing questionnaire returns a no training control group has been isolated for comparison with the experimental group wherever pertinent.

Chi square and the test for significance of the difference between two percentages were the two forms of statistical analysis employed in this phase of the study. Both tests were used when appropriate. The chi square test was not made for any distribution in which any theoretical cell frequency fell below five. Since a *t* test and a chi square test of the same statistics will lead to the same inference when there is one degree of freedom, the test for significance of the difference between two proportions or percentages was not used when chi square was computed from a 2 x 2 table. The five per cent level was selected as the confidence level for both tests.

Certain trends can be noted in the data though in some tables little of statistical significance is apparent. Wherever such trends or a definite pattern is discernable in the data, this information is considered important to the purposes of the project.

TABLE 29 - MEDIA CONSIDERED AVAILABLE BY EXPERIMENTAL AND CONTROL (TOTAL) GROUPS

	EXPERIMENTAL						CONTROL					
	Elementary		Secondary		Total		Elementary		Secondary		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Motion picture films	48	94	48	92	96	93	114	86	74	86	188	86
Filmstrips	50	98	44	85	94	91	113	85	66	77	179	82
Slides	21	41	25	48	46	45	49	37	45	52	94	43
Tape recordings	28	55	35	67	63	61	70	53	43	50	113	52
Phonograph records	47	92	36	69	83	81	110	83	50	58	160	73
Radio programs	27	53	28	54	55	53	67	50	24	28	91	42
Television programs	34	67	28	52	61	59	65	49	28	33	93	42

With one minor exception a comparison of the elementary experimental group with the elementary control group, a comparison of the secondary groups, and a comparison of the totals of both groups all show that the experimental group were more cognizant of media available to them individually as classroom teachers than the control group. In a sense this may be suggestive of attitude toward media by both groups.

TABLE 30 - MEDIA CONSIDERED NECESSARY BY EXPERIMENTAL AND CONTROL (TOTAL) GROUPS

	EXPERIMENTAL						CONTROL					
	Elementary		Secondary		Total		Elementary		Secondary		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Motion picture films	33	65	22	42	55	53	82	62	39	45	121	55
Filmstrips	33	65	11	21	44	43	76	57	23	27	99	45
Slides	9	18	4	8	13	13	20	15	16	19	36	16
Tape recordings	9	18	7	13	16	16	22	17	10	12	32	15
Phonograph records	31	61	6	12	37	36	58	44	14	16	72	33
Radio programs	14	27	0	0	14	14	15	11	5	6	20	9
Television programs	20	39	2	4	22	21	21	16	5	6	26	12

Table 30 indicates the attitude of both groups toward the necessity of the various types of media included for effective teaching. The elementary groups, both experimental and control consistently considered all types of media studied as more essential to effective teaching than did the secondary groups.

In all respects the experimental elementary group considered these media as more necessary in teaching than did the control elementary group. However, the reverse is true in comparing the secondary experimental and the control groups and in comparing the total experimental and control groups.

TABLE 31 - MEDIA CONSIDERED AVAILABLE BY EXPERIMENTAL GROUP AND CONTROL GROUP WITHOUT TRAINING

	EXPERIMENTAL		CONTROL	
	No.	%	No.	%
Motion picture films:				
Available	96	93	35	97
Not available	7	7	1	3
Filmstrips:				
Available	94	91	30	83
Not available	9	9	6	17
Slides:				
Available	46	45	13	36
Not available	57	55	23	64
Tape recordings:				
Available	63	61	12	33
Not available	40	39	24	67
Phonograph records:				
Available	83	81	26	72
Not available	20	19	10	28
Radio programs:				
Available	55	53	10	28
Not available	48	47	26	72
Television programs:				
Available	61	59	17	47
Not available	42	41	19	53

Computations of chi-square for the categories included in Table 31 revealed highly significant differences between the experimental and the control groups in the number who reported availability of tape recordings and radio programs. In other categories the obtained chi-square is significant at the .01 level.

TABLE 32 - NECESSITY OF MEDIA--EXPERIMENTAL GROUP AND CONTROL GROUP WITHOUT TRAINING

	EXPERIMENTAL		CONTROL	
	No.	%	No.	%
Motion picture films:				
Necessary	55	53	18	50
Not necessary	48	47	18	50
Filmstrips:				
Necessary	44	43	13	36
Not necessary	59	57	23	64

TABLE 32 (Continued)

	EXPERIMENTAL		CONTROL	
	No.	%	No.	%
Slides:				
Necessary	13	13	5	14
Not necessary	90	87	31	86
Tape recordings:				
Necessary	16	16	4	11
Not necessary	87	84	32	89
Phonograph records:				
Necessary	37	36	10	28
Not necessary	66	64	26	72
Radio programs:				
Necessary	14	14	1	3
Not necessary	89	86	35	97
Television programs:				
Necessary	22	21	4	11
Not necessary	81	79	32	89

A tendency is apparent in Table 32 for the members of the experimental group to indicate a stronger feeling of the necessity for most of the types of media listed for use in classroom teaching than the members of the control group who had had no training. A greater dependence is apparent on the part of both groups on motion picture films and filmstrips than on other media. In analyzing Table 32 the obtained chi-square of 6.28, significant at the .05 level, reveals that the two groups do differ in their attitude toward the necessity of radio programs for effective teaching. This may have been due to the number of recent graduates of the University employed in the Atlanta area where educational radio is available to the public schools.

TABLE 33 - EXPERIMENTAL AND CONTROL GROUPS REPORTING FREQUENT USE OF MEDIA

	EXPERIMENTAL						CONTROL					
	Elementary		Secondary		Total		Elementary		Secondary		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Motion picture films	34	67	23	44	57	55	73	55	29	34	102	47
Filmstrips	21	41	6	12	27	26	49	37	19	22	68	31
Slides	2	4	0	0	2	2	12	9	8	9	20	9
Tape recordings	2	4	4	8	6	6	9	7	8	9	17	8
Phonograph records	31	61	6	12	37	36	65	49	13	15	78	36
Radio programs	7	14	0	0	7	7	11	8	4	5	15	7
Television programs	23	45	4	8	27	26	29	22	5	6	34	16

TABLE 34 - EXPERIMENTAL AND CONTROL GROUPS REPORTING OCCASIONAL USE OF MEDIA

	EXPERIMENTAL						CONTROL					
	Elementary		Secondary		Total		Elementary		Secondary		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Motion picture films	6	12	15	29	21	20	28	21	35	40	63	29
Filmstrips	19	37	18	35	37	36	52	39	29	33	81	37
Slides	12	24	9	17	21	20	18	14	23	26	41	19
Tape recordings	15	29	12	23	27	26	41	31	9	10	50	23
Phonograph records	7	14	13	25	20	19	34	26	16	19	50	23
Radio programs	13	25	8	15	21	20	39	29	14	16	53	24
Television programs	8	16	12	23	20	19	30	23	18	21	48	22

TABLE 35 - EXPERIMENTAL AND CONTROL GROUPS REPORTING NO USE OF MEDIA

	EXPERIMENTAL						CONTROL					
	Elementary		Secondary		Total		Elementary		Secondary		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Motion picture films	2	4	10	19	12	12	5	4	9	10	14	6
Filmstrips	2	4	14	27	16	16	10	8	22	25	32	15
Slides	18	35	19	37	37	36	46	35	29	33	75	34
Tape recordings	17	33	18	35	35	34	43	32	37	43	80	37
Phonograph records	1	2	16	31	17	17	5	4	33	38	38	17
Radio programs	12	24	22	42	34	33	36	27	33	38	69	32
Television programs	6	12	17	33	23	22	29	22	30	34	59	27

Tables 33-35 analyze the use made of media by experimental and control groups on a frequent, occasional, and no use basis. In general, elementary teachers in both groups made considerably more use of most types of media included than did secondary teachers. This is true also in comparing elementary experimental subjects with elementary control subjects, and secondary control subjects. When the totals of both groups are considered, a difference in favor of experimental subjects is noted in frequency of use of motion picture films and television programs only.

TABLE 36 - EFFORT MADE DURING UNDERGRADUATE TRAINING TO PROVIDE CONTROL SUBJECTS WITH INFORMATION OR SKILL IN CLASSROOM USE OF INSTRUCTIONAL MEDIA

	Elementary		Secondary		Total*	
	No.	%	No.	%	No.	%
No effort made	19	14	17	20	36	16
Audio-visual course	31	23	15	17	46	21
Methods course	59	44	46	53	105	48
Workshop or seminar	31	23	11	13	42	19
Other	28	21	9	10	37	17
No information	5	4	2	2	7	3

* Percentages do not total 100 since in some instances subjects are included in more than one category.

Table 36 indicates a variety of approaches used during the pre-service program of the control group to provide some experiences in instructional media. About one in five of the control group registered for an organized course in audio-visual education. Approximately one half of the group had some emphasis placed on instructional media during methods courses. It can safely be assumed that aside from those subjects who elected to take an audio-visual course during pre-service teacher education, few of the control group experienced organized effort regarding instructional media and their use in classroom teaching prior to graduation.

TABLE 37 - EXPERIMENTAL GROUP--EMPHASIS ON INSTRUCTIONAL MEDIA IN PROFESSIONAL COURSES OTHER THAN CURRICULUM AND PROCEDURES COURSES

	Elementary		Secondary	
	No.	%	No.	%
Some emphasis in other professional courses	7	14	1	2
None	37	72	38	73
No information	7	14	13	25

According to Table 37 only eight members of the experimental group were aware that emphasis was placed on instructional media during a professional pre-service course, aside from the effort made in this regard as a part of this project.

In evaluating the use made of instructional media by members of the experimental and control groups, it was recognized that quality of use could be measured solely on the basis of the accomplishment or lack of accomplishment of original teaching purpose through the use of such media. Such a measurement could not be attempted for purposes of this project. However, an attempt was made to establish some relationship between quality and quantity of use by recognizing that certain conditions of use generally prevail if use is effective and by comparing experimental and control groups on these bases.

For this purpose it was recognized that certain conditions of use may be conducive to effectiveness. The following conditions were isolated for this phase of the study:

Instructional media can usually be used more effectively in the classroom than in some other location.

The selection of instructional media for a specific teaching purpose can usually best be made by the classroom teacher.

Use of media is probably more effective when fewer items of each type are used during a single class period.

Effective use of media requires that a classroom teacher be familiar with their content before they are used in the classroom.

Effective use of media requires that a classroom teacher operate the necessary equipment whenever the operation is integral to the lesson being taught.

Instructional media can usually be used more effectively with a single class group than with several groups simultaneously.

Though the decision to use a certain number of items of material during a specified period is the responsibility of the classroom teacher, full advantage should be taken of available media.

Often the re-use of a piece of material can add to the effectiveness of classroom teaching.

Specific and organized procedures are generally followed before and after media are effectively used in classroom teaching.

The effective use of media requires that deterrents to use be recognized and overcome wherever possible.

Tables 38 through 48 include the classroom use made of instructional media by experimental and control subjects according to these conditions.

TABLE 38 - WHERE TEACHERS USE MEDIA--EXPERIMENTAL AND CONTROL (NO TRAINING) GROUPS

	Experimental		Control	
	No.	%	No.	%
Motion picture films:				
Classroom	50	48	9	25
*Other	42	41	25	69
No information	11	11	2	6
Filmstrips:				
Classroom	73	71	19	53
Other	10	10	7	19
No information	20	19	10	28
Slides:				
Classroom	38	37	7	19
Other	6	6	3	8
No information	59	57	26	73
Tape recordings:				
Classroom	51	50	9	25
Other	2	2	2	6
No information	50	48	25	69
Phonograph records:				
Classroom	77	75	21	58
Other	4	4	4	11
No information	22	21	11	31
Radio programs:				
Classroom	44	43	9	25
Other	1	1	1	3
No information	58	56	26	76
Television programs:				
Classroom	27	27	4	11
Other	26	25	8	22
No information	49	48	24	67

* An audio-visual room or an auditorium or cafeteria used alone, in combination, or in combination with the classroom.

In analyzing Table 38 chi-squares were computed where appropriate and revealed no differences between the experimental group and the control group in these categories. Significant differences in percentages were found between the two groups relative to where teachers use motion picture films, slides, and tape recordings. The difference in the percentage of teachers within the two groups who use motion picture films in the classroom is significant at the .05 level. The difference in the percentage who use this medium in some other room is significant at the .01 level. A difference significant at the .05 level was found between the two groups in the use of the classroom for the showing of slides. The difference in the percentage of teachers within the two groups who use tape recordings in the classroom was found to be significant at the .01 level. Sixty-nine per cent of the control group and forty-eight per cent of the experimental group failed to provide information as to where teachers use tape recordings--a difference significant at the .05 level.

TABLE 39 - EXPERIMENTAL AND CONTROL (NO TRAINING) GROUPS--
WHO SELECTS MEDIA

	Experimental		Control	
	No.	%	No.	%
Motion picture films:				
Teacher	87	84	33	92
*Other	11	11	3	8
No information	5	5	0	0
Filmstrips:				
Teacher	80	78	28	77
Other	8	8	2	6
No information	15	14	6	17
Slides:				
Teacher	46	45	16	44
Other	6	6	2	6
No information	51	49	18	50
Tape recordings:				
Teacher	50	48	13	36
Other	10	10	2	6
No information	43	42	21	58
Phonograph records:				
Teacher	71	69	25	69
Other	9	9	2	6
No information	23	22	9	25
Radio programs:				
Teacher	41	40	12	33
Other	14	14	1	3
No information	48	46	23	64
Television programs:				
Teacher	46	44	16	44
Other	13	13	2	6
No information	44	48	18	50

*Principal, audio-visual coordinator, or a committee working alone or in combination, with or without the classroom teacher's participation.

Chi-square was not computed for the difference in frequencies in these categories since some cell frequencies fell below the recommended 5 in each category. A *t* for difference between two percentages was computed and revealed no true differences between the experimental and the control groups in the matter of who selects the various media for use by the teachers. The selection of media is a matter of school policy in many of the schools used in the project. In all probability a wider variety of media, selected by the classroom teacher, are used by experimental than control subjects.

TABLE 40 - TEACHERS USING A SPECIFIED NUMBER OF EACH MEDIUM DURING ONE CLASS PERIOD--EXPERIMENTAL AND CONTROL (TOTAL) GROUPS

	EXPERIMENTAL						CONTROL					
	Elementary		Secondary		Total		Elementary		Secondary		Total	
	No.	%*	No.	%	No.	%	No.	%	No.	%	No.	%
Motion picture films:												
One	33	83	24	63	57	73	73	72	51	80	124	75
Two	6	15	8	21	14	18	22	22	9	14	31	19
Three or more	0	0	2	5	2	3	5	5	0	0	5	3
No information	1	3	4	11	5	6	1	1	4	6	5	3
Filmstrips:												
One	20	48	13	54	33	50	55	54	25	52	80	54
Two	12	29	8	33	20	30	36	36	13	27	49	33
Three or more	3	5	2	8	5	8	6	6	5	10	11	7
No information	7	17	1	4	8	12	4	4	5	10	9	6
Tape recordings:												
One	11	65	14	88	25	76	33	66	15	88	48	72
Two or more	0	0	2	13	2	6	2	4	1	6	3	4
No information	6	35	0	0	6	18	15	30	1	6	16	24
Phonograph records:												
One	18	47	12	63	30	53	39	40	14	48	53	41
Two	5	13	4	21	9	16	19	19	4	14	23	18
Three	8	21	0	0	8	14	12	12	0	0	12	9
Four	3	8	1	5	4	7	15	15	3	10	18	14
Five or more	2	5	1	5	3	5	3	3	7	24	10	7
No information	2	5	1	5	3	5	11	11	1	3	12	9

* Expressed as per cents of those teachers who indicated they used the medium to some extent.

There were no significant differences between the experimental and the control groups in the number of each medium used during a single class period. The same results were obtained when the experimental group was compared with those of the control group with no post-graduate training in instructional media. Table 40 includes the experimental group and the total control group with an elementary and secondary breakdown. This is done to permit comparisons. A close examination of percentages within each category does reveal some variations in favor of the experimental group though differences are not significant.

TABLE 41 - PREVIEW OR AUDITION OF MATERIALS PRIOR TO CLASSROOM USE--EXPERIMENTAL AND CONTROL (NO TRAINING) GROUPS

	Experimental		Control	
	No.	%	No.	%
Motion picture films:				
Yes	36	35	18	50
No	49	48	14	39
No information	18	17	4	11
Filmstrips:				
Yes	60	58	19	52
No	17	17	6	17
No information	26	25	11	31
Slides:				
Yes	31	30	8	22
No	9	9	4	11
No information	63	61	24	67
Tape recordings:				
Yes	27	26	8	22
No	10	10	1	3
No information	66	64	27	75
Phonograph records:				
Yes	54	52	22	61
No	15	15	3	8
No information	34	33	11	31

The two groups compared in Table 41 do not differ significantly in the tendency to preview or audition materials before use with a class. Some differences are noted in favor of the experimental group in the tendency to preview filmstrips and slides, and to audition tapes. The comparatively large number of subjects from whom no information was obtained limits the value of the information contained in the table.

TABLE 42 - OPERATION OF EQUIPMENT--EXPERIMENTAL AND CONTROL (NO TRAINING) GROUPS

EQUIPMENT AND OPERATOR	Experimental		Control	
	No.	%	No.	%
Motion picture projector:				
Teacher	53	51	21	58
Other	41	40	14	39
No information	9	9	1	3

TABLE 42 (Continued)

EQUIPMENT AND OPERATOR	Experimental		Control	
	No.	%	No.	%
Filmstrip projector:				
Teacher	69	67	27	75
Other	14	14	1	3
No information	20	19	8	22
Slide projector:				
Teacher	37	36	13	36
Other	8	8	1	3
No information	58	56	22	61
Tape recorder:				
Teacher	44	43	12	33
Other	8	8	0	0
No information	51	49	24	67
Phonograph:				
Teacher	58	56	23	64
Other	19	19	1	3
No information	26	25	12	33
Radio:				
Teacher	35	34	11	30
Other	13	13	1	3
No information	55	53	24	67
Television Set:				
Teacher	40	39	12	33
Other	12	12	1	3
No information	51	49	23	64

No significant differences were found between the two groups in the operation of equipment. This could hardly be expected with a small group and such a large percentage of subjects not reporting. Actually little basis for comparison exists, however, since those of the control group included in Table 42 had been in service from one to five years and probably had developed some skill in operating equipment without organized in-service effort. In addition, in many schools in Georgia the operation of instructional equipment is a matter of school policy and beyond the classroom teacher's control.

In considering operation of equipment as reported by all subjects, experimental and control, a pattern is discernible. Elementary teachers generally operate instructional equipment more frequently than do secondary teachers except where the equipment has special application in a certain field; such as, the tape recorder in the teaching of language, slides in the teaching of science, and the like.

TABLE 43 - TENDENCY TO USE MEDIA WITH CLASS GROUP ONLY--EXPERIMENTAL AND CONTROL (NO TRAINING) GROUPS

	Experimental		Control	
	No.	%	No.	%
Motion picture films				
Class group only	38	37	18	50
Other classes present	49	48	16	44
No information	16	15	2	6
Filmstrips:				
Class group only	63	61	21	58
Other classes present	15	15	4	11
No information	25	24	11	31
Slides:				
Class group only	34	33	12	33
Other classes present	4	4	1	3
No information	65	63	23	64
Tape recordings:				
Class group only	37	36	9	25
Other classes present	5	5	0	0
No information	61	59	27	75
Phonograph records:				
Class group only	61	59	20	56
Other classes present	13	13	3	8
No information	29	28	13	36
Radio programs:				
Class group only	38	37	11	31
Other classes present	5	5	1	3
No information	60	58	24	66
Television programs:				
Class group only	23	22	5	14
Other classes present	27	26	9	25
No information	53	52	22	61

The two groups do not differ significantly as to whether one class only is present or other classes are also present when each medium is used. Again, this could hardly be expected with the small number of subjects studied and generally so large a percentage of subjects not reporting. It would probably be impossible to divorce a classroom teacher's desires in a matter of this type from school policy, considering a limited number of items of equipment available in many instances as well as definite policies regarding where materials will be used in the building.

TABLE 44 - NUMBER OF ITEMS OF VARIOUS MEDIA USED PER MONTH BY EXPERIMENTAL AND CONTROL (NO TRAINING) GROUPS

	Experimental		Control	
	No.	%*	No.	%
Motion picture films	427	21	112	23
Filmstrips	277	13	92	19
Slides (sets)	57	3	14	3
Tape recordings	80	4	28	6
Phonograph records	709	34	179	36
Radio programs	209	10	14	3
Television programs	320	15	54	11

* Percentage of total numbers of items used by the experimental group.

Table 44 shows the relative emphasis given the various media by the two groups. An obtained chi-square of 41.89 is far beyond the .01 point of 16.81 and hence is very significant.

By far a greater number of items were used by the experimental group. In fact, considering number of subjects reporting, approximately twice as many items of each type of media were used by the experimental group than by those of the control group with no training.

TABLE 45 - RE-USE OF THE SAME PIECE OF MATERIAL BY EXPERIMENTAL AND CONTROL (NO TRAINING) GROUPS

	Experimental		Control	
	No.	%	No.	%
Yes	48	47	18	50
No	48	47	14	39
No information	7	6	4	11

According to Table 45 there are no true differences between the two groups relative to the percentage who use the same material more than once with the same class.

TABLE 46 - CLASSROOM PROCEDURES BEFORE USE OF MEDIA BY EXPERIMENTAL AND CONTROL (NO TRAINING) GROUPS

PROCEDURE	Experimental		Control	
	No.	%	No.	%
Discuss content	44	42	19	53
Raise questions	11	11	7	19
Discuss content and raise questions	31	30	3	8
Nothing	3	3	1	3
No information	14	14	6	17

An examination of Table 46 reveals that a difference between the two groups in the percentage of teachers who both discuss content and raise questions before the use of materials is significant at the .01 level.

TABLE 47 - CLASSROOM PROCEDURES AFTER USE OF MEDIA BY EXPERIMENTAL AND CONTROL (NO TRAINING) GROUPS

PROCEDURE	Experimental		Control	
	No.	%	No.	%
Discuss content	61	59	19	53
Discuss content and answer questions	13	13	5	14
Discuss content, answer questions, and test	18	17	9	25
No information	11	11	3	8

The two groups do not differ significantly in classroom procedures after the use of instructional media.

TABLE 48 - FACTORS REGARDED AS DETERRENTS TO THE CLASSROOM USE OF MEDIA BY EXPERIMENTAL AND CONTROL (NO TRAINING) GROUPS

DETERRENTS	Experimental		Control	
	No.	%	No.	%
Due to nature of materials and equipment	57	25	19	22
Due to teacher lack of interest or skill	65	31	39	45
Due to administrative details	90	42	28	33

In analyzing Table 48 a computed chi-square of 5.89 reveals that there are no real differences between the experimental and the no training control groups in the manner in which they regard various factors as deterrents to effective use of audio-visual materials. Examination of Table 48 reveals that of the deterrents to effective utilization thirty-one per cent were due to the lack of interest or skill of teachers in the experimental group; whereas, forty-five per cent were due to this factor among the control group. This difference of fourteen is significant at the .05 level of confidence.

TABLE 49 - ADDITIONS TO THE INSTRUCTIONAL PROGRAM SUGGESTED BY THE EXPERIMENTAL GROUP

SUGGESTIONS	Elementary	Secondary	Total
Nothing should be added	24	11	35
Duplicating processes	0	2	2
More lab experiences	2	3	5
More emphasis on operation of equipment	5	5	10
Assistance in unit preparation	1	0	1
More emphasis on:			
Utilization	5	7	12
Selection	1	1	2
Sources	1	3	4
Preparation of simple materials	0	2	2
Require a course in audio-visual education	2	2	4
Miscellaneous	0	2	2
No suggestion	10	14	24

According to Table 49 members of the experimental group were well satisfied with the instructional program presented during the project. Some emphasis is placed on additional work with the operation of equipment and on the utilization of materials.

TABLE 50 - SUGGESTIONS OF CONTROL GROUP REGARDING INFORMATION AND SKILLS IN INSTRUCTIONAL MEDIA WHICH SHOULD BE INCLUDED IN THE PRE-SERVICE TEACHER EDUCATION PROGRAM

	Elementary	Secondary	Total
Current information on media	2	2	4
Physical nature, sources, operation	39	18	57
Administration	0	2	2
Selection of materials to correlate with curricular needs	2	2	4
Procedures for effective classroom utilization	27	19	46
Evaluation of results of use	2	1	3
A course should be required	33	18	51
No suggestion	28	24	52

Information and skills in equipment and in the classroom utilization of materials receive major emphasis in Table 50. It is interesting that so large a percentage of the control group expressed a need for a required pre-service course in instructional media.

CHAPTER IV

STATUS OF THE USE OF INSTRUCTIONAL MEDIA IN THE PUBLIC SCHOOLS

As a facet of the problem of pre-service teacher education in the classroom use of instructional media, an attempt was made during the final months of the project to appraise administrative procedures and the classroom utilization of media in representative public schools of Georgia that employ University of Georgia graduates as teachers. It was the objective of this phase of the study to isolate implications for pre-service teacher education by surveying public schools for the application of the instructional program which had been developed during the project to practical problems of the classroom use of media faced by beginning teachers.

The survey included as estimate of attitudes toward instructional media--their importance to good teaching and their availability; some facts regarding inventories of materials and equipment in the schools studied; common problems in the local administration of instructional media and deterrents to the use of these media in teaching; and an appraisal of some conditions which influence the effectiveness of utilization of media by teachers in the systems studied.

In general, survey forms for teachers were comparable to forms used in the study of the use of media by experimental and control subjects. The same types of data were included but types of media were extended. Some media not previously considered were added.

The complete survey included three levels of participation: systems, schools, and teachers. Appropriate forms were developed for each level. Complete and reliable information was assured by conducting the survey as a required phase of a field course in school administration, taught by the staff of the University of Georgia and sponsored by the State Department of Education and the State Association of School Administration. The following were used as a basis for sampling the school systems involved in the survey:

1. Direct participation was secured of all superintendents and principals in 71 of the State's 197 public school systems.

2. In systems employing 100 or fewer teachers, all teachers participated.

3. In systems employing over 100 teachers, participation was limited to 100 teachers.

4. Each school, grade level, and subject taught in the systems was represented. Teachers in the larger systems were selected for participation on an alphabetical basis.

Data reported on survey forms were transcribed and tabulated through the use of IBM cards. Any data which appeared to be unreliable because of incompleteness or because of a subjective interpretation of the survey form were omitted from tabulations. Though data contained in the cards punched for this survey could be studied statistically in a number of ways, an intensive statistical analysis was not required for this report. An effort was made through tabulations to establish a relationship between data and practices in the schools as they may suggest implications for the pre-service education of teachers in their classroom uses of instructional media.

Tables 54 through 76 have been developed on specific and obvious premises relative to the use of instructional media in classroom teaching. Each table includes the collective results of the survey expressed in percentage.

POPULATION

TABLE 51 - SCHOOL SYSTEMS SURVEYED

SCHOOL SYSTEMS	Number in Georgia	Number Surveyed	Per Cent Surveyed
County	159	61	39
Independent	38	10	26
Total	197	71	36

TABLE 52 - SCHOOLS, TEACHERS, AND PUPILS SURVEYED

	Number in Georgia	Number Surveyed	Per Cent Surveyed
Schools	1,994*	558	28
Teachers	34,606*	5,416	16
Pupils	954,596**	241,609	25

* From Georgia Educational Directory, 1961-62

** As of January, 1962, Statistical Records, Georgia State Department of Education.

TABLE 53 - TYPE OF SCHOOLS SURVEYED

TYPE OF SCHOOL	Number	Per Cent
Elementary	391	70
Secondary	78	14
12-Grade	89	16
Total	558	100

The survey included approximately: 1/3 of the school systems in Georgia, 1/4 of the schools, 1/6 of the teachers, and 1/4 of the pupils. Of the schools surveyed, approximately 1/6 were secondary, 1/6 were 12-grade, and 2/3 were elementary.

ATTITUDES TOWARD MEDIA

TABLE 54 - MEDIA CONSIDERED NECESSARY BY SUPERINTENDENTS AND PRINCIPALS

	71 Superintendents		531 Principals	
MEDIA (Summary)	No.	%	No.	%
Printed materials	57	80	433	82
Graphic, real, and photographic materials	47	66	346	65
Projected materials	28	39	218	41
Recorded materials	15	21	163	31
Television	6	9	80	15

School administrators in the systems surveyed showed a decided overemphasis on some types of media which they considered necessary for effective teaching at the expense of other media which probably have as high a potential. Eighty per cent of the superintendents and 82 per cent of the principals considered printed materials essential to effective teaching. Percentages dropped to 39 and 41 for projected materials, and 9 and 15 for television. Most emphasis was placed on printed materials, limited emphasis on projected materials, and little emphasis on television.

EQUIPMENT AND MATERIAL - AVAILABILITY

TABLE 55 - MEDIA AVAILABLE AS REPORTED BY PRINCIPALS

TYPE OF MEDIA	Number Principals Reporting Availability	Per Cent of 531 Principals
Printed materials (other than textbooks)	195	37
Maps, globes, charts	452	85
Flat picture materials	147	28
Objects, models, specimens	293	55
Filmstrips	363	68
Recordings (all types)	260	49
Motion picture projectors	475	90
Filmstrip/Slide projectors	466	88
Record players	471	89

TABLE 55 (Continued)

TYPE OF MEDIA	Number Principals Reporting Availability	Per Cent of 531 Principals
Tape recorders	375	71
Opaque projectors	178	34
Overhead projectors	39	7
Radio receivers	202	38
Television sets	236	44

NOTE: This table reports type of media, not number of items of material and equipment.

Availability of types of material and equipment in the individual schools surveyed, as reported by principals, showed greatest emphasis on maps, globes, charts, objects, models, specimens, filmstrips, motion picture projectors, filmstrip projectors, record players, and tape recorders. Least emphasis was placed on overhead projectors.

TABLE 56 - EQUIPMENT AVAILABLE ON A PER TEACHER AND PER PUPIL BASIS

71 Systems	558 Schools
5,416 Teachers	241,609 Pupils

EQUIPMENT	Number Teachers per Unit of Equipment	Number Pupils per Unit of Equipment
Motion picture projector	12	328
Filmstrip and/or slide projector	8	224
Record player	10	287
Tape recorder	16	431
Opaque projector	48	1,320
Overhead projector	200	5,491
Radio receiver	21	565
Television set	16	436

The number of units of each type of equipment available in the schools surveyed was, on both a per teacher and a per pupil basis, well below generally recognized national standards and standards established by the Georgia plan for participation in the NDEA Title III program.

TABLE 57 - SYSTEMS PROVIDING CENTRALIZED SERVICE

	COUNTY SYSTEMS	INDEPENDENT SYSTEMS	TOTAL No.	TOTAL %
Some type of systemwide service provided	16	2	18	25
Very limited systemwide service provided	6	1	7	10
No service provided	39	7	46	65
Total	61	10	71	100

Two-thirds of the systems included in this survey provided no systemwide service.
One-tenth provided a very limited service in one or more areas.
One-fourth provided some type of service on a systemwide level.

TABLE 58 - SERVICES PROVIDED ON SYSTEM LEVEL

SERVICE	Number of Systems Reporting the Service	Per Cent of Total (71) Systems Reporting
Circulation of some materials on system level	19	27
Circulation of some items of equipment on system level	15	21
Assistance to local schools in the selection of materials	44	62
Assistance to local schools in the selection of equipment	42	59
In-service training in the effective classroom utilization of materials and equipment	57	80
Assistance to local schools in developing adequate classroom facilities for the use of projected materials	56	79

Little effort was made to organize a system-wide educational media service in the systems surveyed. Further, little consistency was evidenced in the types of educational media services attempted on system level.

TABLE 59 - AUDIO-VISUAL COORDINATORS SERVING IN THE SCHOOLS SURVEYED

	Number of Schools	Per Cent of Total
No one	5	1
Teacher	209	39
Principal	161	30
Librarian	70	13
Committee	13	3
Miscellaneous	31	6
Other (combinations)	24	5
No information available	18	3
Total	531	100

In the schools surveyed, most frequently a classroom teacher, the librarian, or the principal served as audio-visual coordinator.

TABLE 60 - TRAINING OF AV COORDINATORS

	NUMBER	PER CENT*
Coordinators with no training	71	14
Coordinators with an audio-visual course	159	31
Coordinators with a workshop or unit in methods course	54	11
Miscellaneous	161	32
No information available	100	20

* Percentages will not equal 100 since categories are not mutually exclusive.

Approximately 1/3 of the audio-visual coordinators in the schools surveyed had no training in educational media; approximately 1/3 had some background; and only about 1/3 had what might be termed an organized course in audio-visual education.

TABLE 61 - RELEASED TIME--AV COORDINATORS

Number Periods Released Time	Number Coordinators	Per Cent of Total
None	347	65
One	133	25
Two	40	8
Three or more	11	2
Total	531	100

About 2/3 of the schools included in this survey allowed no released time for audio-visual coordinators (or had no one serving as coordinator).

About 1/4 allowed one period.

Only 1/10 allowed two or more periods.

TABLE 62 - SUPPLEMENT PAID--AV COORDINATORS

RESPONSE	Number Schools Reporting	Per Cent of Total
Yes	15	3
No	481	95
No information	12	2
Total	508	100

Only three per cent of the schools surveyed paid some supplement to the individual coordinating the use of educational media.

TABLE 63 - ASSIGNED DUTIES--USE OF MEDIA

	EQUIPMENT		MATERIALS		SELECTION		INFORMATION & TRAINING		CLASSROOM FACILITIES		UTILIZATION		PREPARING MATERIALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
AV Coordinator	66	12	128	24	10	2	75	14	13	2	52	10	17	3
Teacher	84	16	58	11	117	22	63	12	116	22	17	3	263	50
Principal	150	28	118	22	48	9	160	30	131	25	180	34	32	6
Librarian	14	2	41	8	4	1	12	2	2	-	8	2	6	1
Teacher and Principal	25	5	30	6	205	39	34	6	51	10	22	4	16	3
Teacher and Coordinator	7	1	9	2	5	1	3	1	-	-	1	-	-	-
Principal and Coordinator	9	2	13	2	10	2	30	6	9	2	44	8	7	1
Miscellaneous	116	22	53	10	90	17	51	10	57	11	96	18	43	8
No information	60	11	81	15	42	8	103	19	15	29	111	21	148	28

A variety of individuals and combinations of individuals in the schools surveyed performed the functions generally recognized as necessary in securing and using instructional media in teaching. No pattern of assigned responsibility was evident.

TABLE 64 - CLASSROOM W/LIGHT CONTROL FACILITIES

	Number	Per Cent
Classrooms reported in schools surveyed	8,604	100
Classrooms with some type of light control facilities	4,287	50

Approximately one-half the classrooms in the schools surveyed had light control facilities for the use of projected materials.

TABLE 65 - STATE FILM AND TAPE SERVICES

531 SCHOOLS REPORTING	FILM		TAPE	
	No.	%	No.	%
Schools using state service	468	88	198	37
Schools expressing no critical comment regarding service	387	83	192	97

Eighty-eight per cent of the schools surveyed used the state film service. Of these schools 83% expressed no critical comment.

Thirty-seven per cent of the schools surveyed used the state tape service. Of these schools 97% expressed no critical comment.

TABLE 66 - STATE SERVICES FAVORED

TYPE OF SERVICE	Number Principals Desiring Service	Per Cent of Total Surveyed
Furnish consultative services in the use of materials	436	82
Furnish consultative services in the administration of materials	388	73
Produce materials	437	82
Conduct local workshops for teachers	475	89

TABLE 66 (Continued)

TYPE OF SERVICE	Number Principals Desiring Service	Per Cent of Total Surveyed
Provide educational radio programs	357	67
Develop standards for teacher education in the use of educational media	454	85
Plan school buildings to facilitate the use of educational media	474	89
Produce educational television programs	447	84

Additional state services most desired by principals of the schools surveyed included: consultative services in the use of materials, the production of materials, emphasis on teacher education in the use of educational media, planning school facilities, and the production of educational television programs.

TABLE 67 - DETERRENTS TO USE OF INSTRUCTIONAL MEDIA IN TEACHING

	Superintendents		Principals		Teachers	
DETERRENTS DUE TO:	No.	%	No.	%	No.	%
Nature of material and equipment	72	22	392	25	2,429	31
Teacher attitude and lack of skill	174	54	655	45	1,430	18
Administrative details	78	24	442	30	3,999	51
TOTAL RESPONSES ALL CATEGORIES	324	100	1,467	100	7,858	100

Table 67 is a cumulative tabulation of responses. It reveals that the same deterrents to the school use of educational media were not recognized by teachers and administrators in the schools surveyed. Teachers were inclined to view administrative details as deterring the program; whereas, administrators were inclined to emphasize teacher attitude and lack of skill on the part of teachers as deterrents.

UTILIZATION OF MEDIA

TABLE 68 - FREQUENCY OF USE OF MEDIA

MEDIA	No. Teachers Reporting Availability (of 5,416 Teachers Surveyed)	No. Teachers Using Media Frequently	Percentage Using Available Mat. Frequently
Textbooks	5,125	3,895	76
Reference books	5,028	3,384	67
Other printed materials	4,416	2,780	63
Maps, globes, charts	4,511	2,916	65
Flat picture materials	3,299	2,068	63
Objects, models, specimens	2,948	1,520	52
*Motion picture films	4,434	2,078	47
Filmstrips	4,205	1,528	36
Slides	1,714	404	24
Recordings	2,944	962	33
Television programs	1,793	612	34

* 4,434 of 5,416 teachers surveyed indicated that motion picture films were available to them. 2,078 of the 4,434 (or 47%) indicated that they used motion picture films frequently in their teaching.

Of materials available to them, teachers in the schools surveyed most frequently used textual, reference, and other printed materials; maps, globes, charts; flat picture material; and objects, models, and specimens. Least frequently used media included filmstrips, slides, recordings, and television programs.

TABLE 69 - PLACE OF USE OF INSTRUCTIONAL MEDIA

	CLASSROOM		AV ROOM		AUDITORIUM		CAFETERIA		TWO OR MORE LOCATIONS	
	No.	%	No.	%	No.	%	No.	%	No.	%
Motion picture films	1,789	33	1,038	19	744	14	214	4	865	16
Filmstrips	3,110	57	378	7	107	2	45	1	377	7
Slides	1,319	24	145	3	43	1	11	-	114	2
Tape recordings	1,625	30	21	-	23	-	13	-	135	3
Phonograph records	3,140	58	16	-	25	-	22	-	278	5
Radio programs	1,009	18	9	-	16	-	7	-	165	3
Television programs	654	12	182	3	231	4	132	2	426	8

Note: Percentages across will not total 100 since information was not provided by some teachers.

TABLE 70 - SELECTION OF MATERIALS

MATERIALS	SELECTED BY Teacher No.	%	Principal No.	%	AV Coordinator No.	%	Committee No.	%	Combination No.	%
Motion picture films	3,930	73	49	1	125	2	59	1	486	9
Filmstrips	3,330	61	82	2	127	2	138	3	491	9
Slides	1,491	28	40	1	49	1	62	1	149	3
Tape recordings	1,604	30	38	1	74	1	29	1	142	3
Phonograph records	2,883	53	57	1	57	1	87	2	354	7
Radio programs	1,015	19	101	2	14	-	16	-	126	2
Television programs	1,123	21	98	2	59	1	60	1	285	5

Note: Percentages across will not total 100 since information was not provided by some teachers.

TABLE 71 - NUMBER OF PIECES OF MATERIAL USED DURING A CLASS PERIOD

TYPE OF MATERIAL	TEACHERS (Based on Total of 5,416) Using One No.	%	Using More Than One No.	%	Not Reporting No.	%
Motion picture films	2,961	54	571	11	1,884	35
Filmstrips	2,218	41	867	16	2,331	43
Tape recordings	1,068	20	1,259	23	3,089	57
Phonograph records	1,268	23	1,173	22	2,975	55

TABLE 72 - PREPARATION BY TEACHERS BEFORE USING MEDIA

MATERIALS	TEACHERS WHO Preview or Audition Materials No.	%	Read Teacher's Guides No.	%	Read Catalog Descriptions No.	%	Make No Preparation No.	%
Motion picture films	2,284	42	1,073	20	3,277	61	87	2
Filmstrips	2,542	47	1,578	29	1,366	25	53	1
Slides	1,084	20					21	-
Tape recordings	937	17			461	9	38	-
Phonograph records	2,397	44	585	10			92	2
Radio programs			160	3			160	3
Television programs			699	13			128	2

Note: Percentages will not equal 100 since categories are not mutually inclusive.

TABLE 73 - OPERATION OF EQUIPMENT

	EQUIPMENT OPERATED BY:													
EQUIPMENT	Classroom Teacher		Pupil		Principal		Coordinator		Another Teacher		Custodian		Two or more Individuals	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Motion picture films	2,531	47	495	9	113	2	299	6	258	5	13	-	808	15
Filmstrips	3,237	60	182	3	8	-	92	2	73	1	6	-	419	8
Slides	1,351	25	70	1	4	-	36	-	30	-	1	-	168	3
Tape recordings	1,412	26	56	1	28	-	53	1	40	-	0	0	170	3
Phonograph records	2,702	50	173	3	12	-	9	-	16	-	0	0	509	9
Television programs	1,093	20	58	1	68	1	36	-	36	-	2	-	192	4

Note: Percentages across will not total 100 since information was not provided by some teachers.

TABLE 74 - NUMBER OF CLASSES USING MEDIA

	TEACHERS USING MATERIALS WITH			
	One Class Only		Other Classes Present	
	No.	%	No.	%
Motion picture films	2,290	42	2,117	39
Filmstrips	3,269	60	617	11
Slides	1,323	24	209	4
Tape recordings	1,452	27	177	3
Phonograph records	2,899	54	399	6
Radio programs	899	17	146	3
Television programs	709	13	674	12

Note: Percentages across will not total 100 since information was not provided by some teachers.

TABLE 75 - RE-USE OF MATERIAL WITH A CLASS GROUP

MATERIAL	Always		Frequently		Occasionally		Never		TOTAL TEACHERS REPORTING
	No.	%	No.	%	No.	%	No.	%	
Motion picture films	108	3	609	15	1,690	42	1,584	40	3,991
Filmstrips	175	5	1,002	28	1,826	50	635	17	3,638
Slides	87	6	377	26	702	48	287	20	1,453
Tape recordings	140	10	431	30	646	44	235	16	1,452
Phonograph records	483	16	1,460	48	918	30	189	6	3,050

TABLE 76 - CLASSROOM PROCEDURE BEFORE USE OF MATERIALS

MATERIAL USED	Nothing		Discuss Content		Raise Questions		Other	
	No.	%	No.	%	No.	%	No.	%
Motion picture films	133	3	3,532	65	2,670	49	155	3
Filmstrips	49	1	3,187	59	2,356	44	116	2
Slides	21	-	1,232	23	839	16	40	1
Tape recordings	41	1	1,064	20	671	12	57	1
Phonograph records	114	2	2,313	43	1,106	20	134	3
Radio programs	57	1	646	12	566	11	40	1
Television programs	66	1	989	18	822	15	75	1

Note: Percentages across will not equal 100 since categories are not mutually exclusive.

TABLE 77 - CLASSROOM PROCEDURES AFTER USE OF MATERIALS

Material Used	Nothing		Discuss Content		Answer Questions		Other	
	No.	%	No.	%	No.	%	No.	%
Motion picture films	14	-	3,753	69	3,515	65	356	7
Filmstrips	6	-	3,274	61	3,090	57	212	4
Slides	8	-	1,235	23	1,195	22	80	2
Tape recordings	21	-	1,115	21	963	18	51	1
Phonograph records	82	2	2,144	40	1,747	32	79	2
Radio programs	25	-	813	15	741	14	37	1
Television programs	24	-	1,169	22	1,069	20	55	1

Note: Percentages across will not equal 100 since categories are not mutually exclusive.

This survey was based on a comprehensive coverage of a representative group of systems, schools, and teachers in public education in Georgia. Coverage included: both county and independent systems; systems of representative size; schools of various size, location, housing, personnel, curriculum, and types of administration.

The coverage of the survey suggests that conditions and practices in attitudes toward educational media, the availability of equipment and materials, administration of the educational media program, and the utilization of educational media in the schools of the State are represented. Ample justification can be found in the preceding tables for the following observations:

School administrators in the schools surveyed lack information about educational media and their potentialities for use in teaching. The thinking of administrators regarding instructional materials and equipment needed in their school systems for effective teaching is not reflected in the availability of such materials and equipment to their teachers nor in the frequency with which these media are used in teaching.

Thinking regarding educational media by both administrators and teachers in the schools surveyed is decidedly "print oriented." Developments in types of media other than printed materials which are available are far in advance of the desire of administrators to make such media available in their schools and of teachers to use such media effectively in their classes.

Regardless of what media are available, teachers in the schools surveyed are inclined to depend largely on printed media as a basis for instruction. Not a great deal of dependence is placed by these teachers on slide materials, recordings, and television lessons. This fact somewhat parallels the availability of media to teachers. By far, printed materials are most frequently available and slides (including transparencies) and television lessons are least available to the teachers reporting in this study.

Comparison of the number of items of equipment on a per teacher and a per pupil basis with nationally recognized standards shows an inadequacy in total number of pieces of equipment of each type available.

An organized and effectively administered instructional materials and equipment program which provides commonly recognized services is practically non-existent in the schools and systems surveyed. Though some systemwide programs are reported, services appear to be limited and inadequate. Individual schools do not have a person assigned specifically to more than the bookkeeping functions involved in facilitating the use of materials and equipment in teaching. Too often these functions are performed by the principal. The coordinator is, in most cases, without background of training which is indicated by responsibilities requiring up-to-date information and certain skills for their performance.

Building needs which would facilitate the use of all types of instructional materials and equipment in classroom teaching are not met. In fact, this survey reveals that in one-half of the classrooms no light control facilities are available to enable teachers to use projected materials. In the adaptation of old buildings and in the construction of new buildings adequate consideration is not being given to the use of up-to-date methods of instruction in the classrooms.

State film and tape services are operated efficiently from the standpoint of administrative detail. However, such services do not involve administration which facilitates utilization of these materials in the classroom. The state film and tape services represent an attempt to provide materials to some 35,000 teachers in about 2,000 schools through four outlets for films and one for tapes. Comments of the survey participants emphasize the securing of materials when needed, policies on film damage, etc., which are administrative problems.

There seems to be rather general agreement that consultative services in instructional media, requirements in teacher education to facilitate classroom use of these media, and the production of instructional materials are services of the State Department of Education most desired by the schools included in this survey.

Administrators and teachers evidence little agreement regarding factors which deter the use of a variety of educational media in the schools surveyed. Administrators consider that this program is deterred mainly by the status of teacher training, teacher knowledge of sources, teacher attitude toward the worthwhileness of these media, teacher inability to operate the necessary equipment involved, teacher inability to use media effectively in the classroom, and teacher fear of damage to materials and equipment.

Teachers are inclined to emphasize administrative details as deterrents to the classroom use of materials. These include: sources of professional help in using materials, light control facilities in the classroom, organizing the storage and circulation of materials and equipment, securing materials and equipment when needed, and the details involved in securing materials and equipment.

Conditions which influence effective classroom use of instructional media as evidenced in Tables 69 through 77 are not generally met. These conditions include: where educational media are used in the schools surveyed, who selects the materials used, how many pieces of a certain type of material are used in a single class period, who operates the necessary equipment, how many classes are present, whether the teacher remains with the class when materials are used, how nearly the material covers what is being taught, familiarity of the teacher with the material being used, re-use of the same piece of material, and classroom procedures before and after the use of materials.

CHAPTER V

SUMMARY AND IMPLICATIONS

In the development of this project, competency in the classroom use of instructional media was emphasized on three levels:

1. Acquaintance with media and their potentialities through organized pre-service instruction and laboratory experiences.

2. A knowledge of the application of media to classroom teaching through the student teaching program.

3. Behavior in a practical situation through a follow-up of beginning teachers.

Competencies singled out for specific emphasis included:

1. A knowledge of the mechanics of materials and equipment--physical nature, operation, and potentialities--necessary to their use in instruction.

2. An ability to utilize media effectively whenever appropriate to accomplish the objectives of instruction.

3. An ability to create within a given classroom situation conditions, both intrinsic and extrinsic, which assure a contribution to learning.

4. An ability to create and to display effectively simple types of instructional media.

The development of competencies was considered solely from the undergraduate and pre-service level. The instructional phase of the project was not intended as a course in the professional sequence or as a substitute for such a course. Instruction was elementary and introductory only. Instruction given during the project did not conflict with the course program of the College of Education in instructional media. This course program continued its emphasis on in-service and graduate instruction.

It was apparent throughout the project that emphasis on instructional media during pre-service teacher education could not be divorced from other phases of the undergraduate professional sequence. As instruction progressed it became clear that emphasis on instructional media could best be developed on a team basis through cooperation among the professional staff, with an appropriate allotment of time for the study of instructional media, and with established objectives for instruction and laboratory opportunities.

Throughout the project the role of the public school supervising teacher in pre-service teacher education and the influence exerted by the supervising teacher on the beginning teacher were considered. It was recognized that, independent of the type of instructional program developed for pre-service teachers, supervising teachers would exert considerable influence on the use of instructional media by student teachers during and perhaps after the student teaching experience. Consequently, as basic guides to the instructional program developed for the project an attempt was made to assess supervising teachers' use of media in their teaching, their estimate of the competencies in this area which they possessed, and their opinion regarding relative emphasis of various phases of the instructional and laboratory pre-service program in the use of instructional media.

It was evident that in their use of instructional media in the classroom, elementary supervising teachers used all types more frequently than did secondary teachers. More media, in greater variety, were used by supervising teachers in larger schools. Supervising teachers who had been in classroom teaching for a longer period tended to use the types of media considered in the project more frequently than those with less classroom teaching experience. Supervising teachers tended to maintain throughout their experience somewhat of a pattern of emphasis on the use of certain types of media. The greatest use was made of media by supervising teachers who had been working with student teachers for a period of four to six years. A relationship seemed to exist between the type of media used by supervising teachers and the subject fields in which they taught.

In the matter of competencies which supervising teachers felt they possessed, generally elementary supervising teachers seemed to be better informed regarding instructional media than secondary teachers. Higher competency seemed to exist in the selection of materials, in arranging classroom conditions conducive to effective use, and in procedures for utilization of media in the classroom. Least competency seemed to exist in a knowledge of research regarding the classroom use of media.

Supervising teachers in the larger schools seemed to have less competence in the technical aspects of instructional media but more in the effectiveness of use of media in their classroom teaching. Competence in the use of media seemed to increase with the number of years of supervision. High school social studies, English, and science supervising teachers seemed to have more information regarding instructional media than those in other teaching fields. Highest skill seemed to be possessed by supervising teachers in social studies and science.

Generally supervising teachers tended to suggest that heaviest emphasis during the pre-service program should be placed on those areas in which they felt most competent. As a group they were of the opinion that greatest emphasis should be placed on the selection of instructional materials and on a knowledge of their potentialities for contributing to classroom instruction. Least emphasis was suggested by the group as a whole on the physical nature of media and on the implications of research findings. Consistently the highest emphasis was placed on the skill to select appropriate media and to use them effectively in the classroom, and least emphasis on skills relating to the technical aspects of equipment. Supervising teachers in the larger schools tended to place less emphasis on the development of skills in the operation of equipment during pre-service teacher education than those in the smaller schools. Little difference was suggested in relative emphasis for various phases of the pre-service program when considered by years of classroom experience or years of experience in the supervision of student teachers. Neither was there a noticeable difference in suggested emphases when considered in relation to subject areas taught by the supervising teacher.

Specifically, supervising teachers thought that student teachers who came to them as prospective teachers should know how to select materials appropriate to the curriculum and how to use media effectively in their teaching. These competencies presuppose that beginning teachers should have a working knowledge of sources, procedures of use, the mechanical operation of equipment, and classroom conditions which contribute to effectiveness.

It became apparent at this point in the study that pre-service teacher education in the classroom use of instructional media could not be developed independent of the student teaching experience. It became apparent also that some effort through a developmental in-service program for supervising teachers is needed to bridge the gap of a deficiency in their professional preparation and to keep them up to date regarding technical developments in instructional media if they are to participate in the education of beginning teachers.

In a study of some characteristics of the utilization of media by beginning teachers with organized training in the use of certain media in classroom teaching compared with teachers in service without such training, results in favor of the group with training were obtained.

Subjects with training were more aware of media available to them individually as classroom teachers than subjects without such training though comparable conditions of the availability of media prevailed with both groups. The group with training considered that a variety of media was more necessary to effective teaching than did those without training. An analysis of the frequency of use of media by both groups revealed that those who had received training used media which required specific information and skill more frequently than did those of the control group with no pre- or post-graduation training.

In an analysis of certain specifics of use which may influence effectiveness, generally the group with training was favored. The influence of the pre-service training program was reflected in whether or not media were used in the classroom environment rather than in some other location in the building when the use of those media required special information or skill. The group with training used such media as motion picture films more frequently in the classroom than did the no training group.

In the matter of selection of media for use in teaching, though no true differences in the two groups were noted, beginning teachers with no training were inclined to select their own materials except in the case of motion picture films and television programs. Actually in the schools studied little initiative on the part of the classroom teacher in the selection of some types of media is possible because of school policies in utilizing state instructional media services.

Subjects with and without training in the classroom use of instructional media were also surveyed concerning the following conditions of the classroom use of media: number of pieces of each medium used during a single class period, the preview or audition of materials before use, the operation of equipment when materials were used, the tendency to use materials with one or more classes simultaneously, the number of items of various media used, the re-use of a piece of material with the same class group, classroom procedures before and after the use of media, and factors regarded as deterrents to the classroom use of media.

Of these specifics of use little difference statistically in favor of either those with training or without training could be found. However, by interview and observation more effective use was evidenced by beginning teachers with pre-service training. They were more aware of those media appropriate for their use, the physical conditions required for effective use, and of deterrents to use due to a teacher's lack of information, skill, or interest as well as those deterrents inherent to school organization and operation.

In fact, in studying the differences in the utilization of instructional media by beginning teachers with and without training ample justification was found for the type of instructional program which was developed during the project.

Instructional media programs in the public schools employing University of Georgia graduates were examined for problems in this area faced by beginning teachers which may have implications for the pre-service teacher education program. It was the purpose of this phase of the study to locate conditions in the use of instructional media faced by beginning teachers in a less orderly and controlled situation than college classes and the student teaching experience. From data collected the following conditions were apparent:

The beginning teacher in the public schools of Georgia will probably face a situation in which relatively high emphasis is placed on printed media, both from the standpoint of availability and classroom use throughout the school. He will find a decidedly unsettled philosophy regarding relative emphasis which should be placed in classroom teaching on various types of media. A generally inadequate number of pieces of equipment will be available to him as a classroom teacher. Few school systems will be found with an organized central instructional media service which recognizes and serves definite functions in making media available for classroom use. Little professional consultative service regarding instructional media will be available. The beginning teacher will find that the duties involved in facilitating the classroom use of media are assigned to various individuals with provisions made for little organization.

The beginning teacher will find that the light cannot be controlled in approximately one half of the classrooms in which he will teach. He will find a multiplicity of deterrents to the use of media based on the lack of interest or ability to use media effectively by in-service teachers, and a lack of administrative planning to facilitate utilization. He will find that materials are selected as a matter of school policy by a variety of individuals and groups. He will find abuses in the number of pieces of media used in a single class period. He will find limited familiarity with media on the part of in-service teachers before classroom use. He will find a variety of school policies controlling the operation of instructional equipment. In many situations he will find that several classes are seeing projected material together regardless of subject field or grade level. He will find that infrequently do in-service teachers re-use the same piece of material with the same class group. He will find a lack of organized classroom procedures before and after utilization which would assure effectiveness.

A realistic pre-service program for beginning teachers in the classroom uses of instructional media will take into consideration conditions in the schools which employ the students who finish this program. Generally such conditions will include: status of regard for necessary instructional media by administrators; the status of use of media by in-service teachers; the lack of an organized instructional media administrative program; building conditions which hinder or facilitate the utilization of media; participation of the school in any outside services available on national, state, or district level and regulations controlling the use of these services; the local availability of consultative services and assistance in classroom utilization; an estimate of the full gamut of factors which deter the use of media; the status of school policies which influence utilization; the status of liaison among faculty and supervisory and administrative staffs within the school and system with relation to the classroom utilization of instructional media.

IMPLICATIONS

This project demonstrated that if specific emphasis is placed on the classroom use of instructional media during pre-service teacher education, that emphasis will be reflected in the effectiveness of the classroom use of such media by beginning teachers. Organized training during this period in teacher education, developed on specific objectives, with appropriate staff, and with adequate facilities, will make beginning teachers more aware of media and their potentialities, more inclined to use a variety of media more frequently, and to use these media under more favorable conditions for classroom learning. Specific objectives include familiarity with both the physical and the content aspects of media and their use in the classroom. Appropriate staff includes professional personnel with major graduate study in instructional media, and sufficient graduate assistants to serve laboratory needs. Adequate facilities include housing favorable to the use of all types of media, a sufficient variety of materials to give the prospective teacher an overview of those media applicable to his major area and level of study, and sufficient equipment to illustrate types available in the average school in which he will begin his teaching career.

Content of the pre-service program in relation to instructional media should be crystallized on competency level. The mechanics of instruction may be accomplished in any of several ways--a course devoted entirely to instructional media or as part of one or several courses in the professional sequence. Whatever theoretical instruction is planned should be accompanied by appropriate laboratory opportunities. It has been emphasized that a study of instructional media during pre-service teacher education cannot be divorced from other areas of the curriculum and will require close cooperation among members of the professional staff. By the same token, a lack of skill in the use of instructional media by professional staff during the pre-service program is reflected in the use of these media by beginning teachers.

The beginning teacher's use of instructional media should be considered within the context of the public school classroom, hence emphasis should be placed on this area during student teaching. In fact, instruction can probably best be developed in close coordination with the student teaching program to demonstrate to the prospective teacher the practical application of pre-service information and skills in this area to classroom teaching.

Pre-service emphasis on instructional media should recognize conditions in the schools employing teacher education graduates. The program which is developed should be based on an objective evaluation of these conditions, including functions to be served by the program and the responsibilities of administrative and supervisory personnel for the performance of these functions.

The instructional media program for the pre-service education of teachers should be highly flexible to allow the adaptation of content to the changing status of technological development in teaching media. Rather than emphasis on a multiplicity of mechanical aspects of media and their use, attention should be directed to the relationship of communication theory to classroom teaching and to the implications of the psychology of learning for the classroom use of instructional media. In fact, a rationale for instruction in this area should be developed. If a rationale exists to date, it is based on the mechanics of media rather than on the contribution which the use of media can make to classroom instruction.

- - - - - - - - - - - - - - - - - - -

Several inferences of this study should be noted:

In view of the influences exercised by the supervising teacher during student teaching and the status of the use of media by in-service teachers, some type of developmental program for in-service teachers should be undertaken. This program should bridge the gap between the professional training of these teachers and recent developments in instructional media. It should include familiarity with recent developments in equipment and new materials available and their potentials for use in classroom instruction.

The accreditation of schools should be examined from the standpoint of promoting conditions favorable to the classroom use of instructional media and assuring an adequacy of materials and equipment available in the public schools.

Some means should be found through certification to assure that all teachers, both pre- and in-service, have the necessary information and skill involved in the classroom use of media.

The feasibility of developing demonstration centers on a regional or state basis should be considered. Such centers could serve as a guide to teacher education institutions in establishing programs in this area. Such centers should probably include facilities and staff on teacher education level and classroom demonstrations in the public schools which will illustrate how media can be used effectively and the results which can be secured through effective use.

- - - - - - - - - - - - - - - - - - - -

This project was based on a state study only. It concerned the teacher education program of the University of Georgia and the use of instructional media in the public schools of Georgia. Some aspects of the project should be replicated on national level.

APPENDICES

APPENDIX A

COMPETENCIES

Pre-service Teacher Education in the Use of Media of Mass Communication in Classroom Instruction

NDEA Research Project--University of Georgia--No._____

This questionnaire is being sent to supervising teachers throughout Georgia. It is a part of an effort to decide what competencies in the classroom use of motion picture films, filmstrips, slides, recordings, and radio and television programs should be included in the pre-service education of teachers.

Will you, as a supervising teacher, help make the results of this study authoritative by checking the appropriate spaces below and returning the questionnaire in the stamped envelope provided?

Respondents to this questionnaire are not identified by name. However, it will be important to the project to know how many years you have been a classroom teacher (_____years), and how many years you have been a supervising teacher (_____years).

For purposes of this study, mass media include: motion picture films, filmstrips, slides, recordings, and radio and television programs; and the equipment necessary for their use in the classroom.

First, how often do you use these media in your classroom teaching? Please check the appropriate spaces below:

	Frequently	Occasionally	Never
Motion picture films			
Filmstrips			
Slides			
Pre-recorded magnetic tapes			
Phonograph records			
Educational radio programs			
Educational television programs			

Listed on the following pages are specific items of information and skill involved in the use of these media in teaching. Will you please indicate by checking the appropriate spaces to what degree you feel that you, as a teacher, have this information and skill, and how important you feel these items are in the pre-service education of teachers?

TO WHAT DEGREE DO YOU FEEL THAT YOU HAVE THE FOLLOWING INFORMATION OR SKILL?
(Check appropriate spaces below.)

	I have sufficient information (or skill)	I have some information (or skill)	I have no information (or skill)
Physical characteristics of each type of material and equipment			
Sources of each type of material and equipment			
Classroom conditions (physical) which limit or foster the use of materials in teaching			
Methods of classifying, storing, maintaining, and circulating materials and equipment			
Potentials of each type of material for use in teaching			
Selection of materials to correlate with the curriculum			
Results of research studies which have implications for using materials in teaching			
Specific procedures essential to effective utilization			
Evaluation of results accomplished through the use of materials			
Skill to recognize the material and equipment which will be appropriate for use in a given physical situation			
Skill to appraise the technical quality of material and equipment			
Skill in the operation of equipment			
Skill in the simple maintenance of material and equipment			
Skill in arranging the best physical conditions for the use of equipment			
Skill in the selection of appropriate materials for specific teaching purposes			
Skill to appraise the educational worth of material			
Skill in the actual use of material and equipment in a classroom situation			
Skill in evaluating the effectiveness of the use of materials in teaching			

WHAT IS YOUR RATING OF THE IMPORTANCE OF INCLUDING AND EMPHASIZING THIS INFORMATION OR SKILL IN THE PRE-SERVICE EDUCATION OF TEACHERS? (Check appropriate spaces below.)

	Should be emphasized	Included but not emphasized	Should be omitted
Physical characteristics of each type of material and equipment			
Sources of each type of material and equipment			
Classroom conditions (physical) which limit or foster the use of materials in teaching			
Methods of classifying, storing, maintaining, and circulating materials and equipment			
Potentials of each type of material for use in teaching			
Selection of materials to correlate with the curriculum			
Results of research studies which have implications for using materials in teaching			
Specific procedures essential to effective utilization			
Evaluation of results accomplished through the use of materials			
Skill to recognize the material and equipment which will be appropriate for use in a given physical situation			
Skill to appraise the technical quality of material and equipment			
Skill in the operation of equipment			
Skill in the simple maintenance of material and equipment			
Skill in arranging the best physical conditions for the use of equipment			
Skill in the selection of appropriate materials for specific teaching purposes			
Skill to appraise the educational worth of material			
Skill in the actual use of material and equipment in a classroom situation			
Skill in evaluating the effectiveness of the use of materials in teaching			

Please list on the back of this sheet any additional competencies or express any personal feelings you have regarding pre-service teacher education in the use of the teaching materials included in this project.

APPENDIX B

FIRST WEEK - STUDENT TEACHER'S REPORT ON INSTRUCTIONAL MEDIA

Student Teacher's Name ______________________ Date ______________

Supervising Teacher's Name ______________________________________

School ___________________________ Address ______________________

- -

Which of the following equipment will be available for your use or the use of your supervising teacher during your student teaching. Check appropriate spaces and write in the "make" of each type of equipment, if known (that is, Bell and Howell, RCA, Califone, etc.)

	Yes	No	Make
Motion Picture Projector			
Filmstrip Projector			
Slide Projector			
Phonograph			
Tape Recorder			
Radio			
Television Receiver			
Other			

What difficulties do you expect to encounter in using this equipment during your student teaching? (Discuss this with your supervising teacher and also make your own observations.)

SECOND WEEK AND THEREAFTER - STUDENT TEACHER'S REPORT ON INSTRUCTIONAL MEDIA

Student Teacher's Name______________________________Date____________

Supervising Teacher's Name____

School__________________________Address__________________________

- -

Which of the following equipment did you use or see used by your supervising teacher this week? Check appropriate spaces.

	Used by Student Teacher	Used by Supervising Teacher
Motion Picture Projector		
Filmstrip Projector		
Slide Projector		
Phonograph		
Tape Recorder		
Radio Receiver		
Television Receiver		
Other		

What difficulties were encountered in the above uses?________________

____

____

____

____

Which of the above pieces of equipment could have been used but were not?

____

____

____

Why were they not used?____

____

APPENDIX C

COLLEGE OF EDUCATION
UNIVERSITY OF GEORGIA

NDEA PROJECT
Exp. No.____________

Control No.__________

WHICH OF THE FOLLOWING MEDIA ARE AVAILABLE TO YOU FOR USE IN YOUR TEACHING?
WHICH DO YOU CONSIDER NECESSARY FOR EFFECTIVE TEACHING?
HOW OFTEN DO YOU USE THESE MEDIA IN YOUR TEACHING?

	Check each item in appropriate columns				
	Available for my use	I consider necessary for effective teaching	I use frequently	I use Occasionally	I never use
Motion picture films					
Filmstrips					
Slides(any size)					
Tape recordings					
Phonograph records					
Radio programs					
Television programs					

Experimental Group only:

IN WHAT COURSES BESIDES EDUCATION 335/336 WAS AN EFFORT MADE TO GIVE YOU INFORMATION OR SKILL IN THE CLASSROOM USE OF THE ABOVE MEDIA (OR THE EQUIPMENT NEEDED FOR THEIR CLASSROOM USE)?

Control Group only:

WAS EFFORT MADE DURING YOUR UNDERGRADUATE TEACHER EDUCATION PROGRAM TO PROVIDE YOU WITH INFORMATION OR SKILL IN THE CLASSROOM USE OF THE ABOVE MEDIA (OR THE EQUIPMENT NEEDED FOR THEIR CLASSROOM USE)? Check the items below which apply to your undergraduate program.

_____No effort made

_____An audio-visual course

_____A course in ____________
(field)

_____ A unit in a methods course

_____ A unit in a seminar course

_____A workshop on instructional materials and equipment

_____Other (describe) ____

WHERE ARE THE FOLLOWING USED IN YOUR TEACHING? (Check the appropriate columns.)

	Classroom	A-V Room	Auditorium	Cafeteria
Motion picture films				
Filmstrips				
Slides				
Tape recordings				
Phonograph records				
Radio programs				
Television programs				

WHO SELECTS THE FOLLOWING FOR USE BY THE TEACHERS IN YOUR SCHOOL?

	Teacher	Principal	A-V Coordinator	A Committee
Motion picture films				
Filmstrips				
Slides				
Tape recordings				
Phonograph records				
Radio programs				
Television programs				

HOW MANY OF EACH OF THE FOLLOWING DO YOU ORDINARILY USE DURING ONE CLASS PERIOD?

	Average Number		Average Number
Motion picture films	____________	Tape recordings	____________
Filmstrips	____________	Phonograph records	____________

DO YOU PREVIEW AND/OR AUDITION THE FOLLOWING MATERIALS BEFORE USING THEM IN YOUR TEACHING?

	Yes	No		Yes	No
Motion pictures	___	___	Tape recordings	___	___
Filmstrips	___	___	Phonograph records	___	___
Slides	___	___			

WHO OPERATES THE EQUIPMENT WHEN YOU USE THE FOLLOWING IN YOUR TEACHING?

	Classroom Teacher	Another Teacher	The Principal	A-V Coordinator	A Pupil	Custodian
Motion picture films						
Filmstrips						
Slides						
Tape recordings						
Phonograph records						
Radio programs						
Television programs						

DO YOU USE THE FOLLOWING WITH YOUR CLASS ONLY, OR ARE OTHER CLASSES PRESENT ALSO?

	With my class only	Other classes present also
Motion picture films		
Filmstrips		
Slides		
Tape recordings		
Phonograph records		
Radio programs		
Television programs		

ABOUT HOW MANY OF EACH OF THE FOLLOWING DO YOU USE IN YOUR TEACHING DURING A WEEK OR A MONTH?

	Average number			Average Number	
	Per week	Per month		Per week	Per month
Motion picture films	______	______	Phonograph records	______	______
Filmstrips	______	______	Radio programs	______	______
Slides	______	______	Television programs	______	______
Tape recordings	______	______			

DO YOU EVER USE THE SAME MOTION PICTURE FILM, FILMSTRIP, OR RECORDING MORE THAN ONCE WITH THE SAME CLASS?

Yes_____ No_____

WHAT DO YOU DO IN YOUR CLASSROOM BEFORE USING A MOTION PICTURE FILM, FILMSTRIP, RECORDING, RADIO PROGRAM, OR TELEVISION PROGRAM?

WHAT DO YOU DO IN YOUR CLASSROOM AFTER USING A MOTION PICTURE FILM, FILMSTRIP, RECORDING, RADIO PROGRAM, OR TELEVISION PROGRAM?

WHICH OF THE FOLLOWING FACTORS INFLUENCE YOUR USE OF MOTION PICTURES, FILMSTRIPS, SLIDES, RECORDINGS, AND RADIO AND TELEVISION PROGRAMS IN CLASSROOM TEACHING?

	Check statements which apply to you
Materials and equipment are too expensive	
It is too difficult to move equipment to my classroom	
Materials are too easily damaged	
Equipment is not kept in good working order	
I have no training in using these materials and equipment	
These materials are generally inappropriate for my use	
I am not interested in using these materials in my teaching	
I can't operate the equipment	
I don't think the use of these materials is worth-while	
I just don't know how to use these materials and equipment effectively in my teaching	
I don't feel that I have the time required to secure and use these materials effectively	
I don't know where and how to secure materials	
I can't preview materials before using them	
I don't know how to evaluate results of using these materials	
I am afraid of criticism by other teachers if I use these materials	
My pupils have usually seen these materials in other classes	
My principal does not encourage the use of these materials	
There is no source of help in using these materials	
I can't darken my classroom	
Materials and equipment are not stored and circulated according to an organized plan	
I can't secure materials when I need them	
There are too many details involved in securing and using these materials	
Parents and/or Board of Education members are not enthusiastic about using these materials	

Other factors not listed above:

____

____

EXPERIMENTAL GROUP ONLY:

WHAT WAS OMITTED FROM EDUCATION 335/336 WHICH YOU THINK WOULD BE HELPFUL TO YOU IN YOUR CLASSROOM USE OF MOTION PICTURE FILMS, FILMSTRIPS, SLIDES, RECORDINGS, RADIO PROGRAMS, AND TELEVISION PROGRAMS?

CONTROL GROUP ONLY:

WHAT INFORMATION OR SKILLS DO YOU THINK SHOULD BE INCLUDED IN THE EDUCATION OF TEACHERS TO HELP THEM USE MOTION PICTURE FILMS, FILMSTRIPS, SLIDES, RECORDINGS, AND RADIO AND TELEVISION PROGRAMS IN THEIR TEACHING?

APPENDIX D

INSTRUCTIONAL MEDIA SURVEY

(Form for Superintendents)

SCHOOL SYSTEM ________________________________

SUPERINTENDENT ________________________________

CURRICULUM DIRECTOR ________________________________

Number teachers in system ______________ Number pupils ______________

Number Schools: Elementary ______________ grades ______________

Jr. High ______________ grades ______________

High School ______________

WHAT INSTRUCTIONAL MATERIALS AND EQUIPMENT DO YOU CONSIDER NECESSARY FOR EFFECTIVE TEACHING IN YOUR SCHOOL SYSTEM?

Check each item in the appropriate column

	Absolutely necessary	Desirable but not essential	Not needed
Textbooks			
Reference books			
Other printed materials			
Programed textbooks			
Teaching machines			
Maps, globes, charts			
Pictures (all types)			
Objects, models, specimens			
Motion picture films			
Filmstrips			
Slides			
Recordings			
Radio programs			
Television programs			
Other (list):			

INFORMATION INCLUDED BELOW PERTAINS TO SYSTEM LEVEL ONLY--THAT IS THOSE MATERIALS AND EQUIPMENT KEPT IN A CENTRAL LOCATION IN THE SYSTEM AND AVAILABLE TO ALL SCHOOLS. DO NOT INCLUDE THOSE ITEMS WHICH REMAIN IN THE INDIVIDUAL SCHOOLS.

	Number available on system level
Reference books (sets)	
Other printed materials	
Programed textbooks	
Teaching machines	
Maps, globes, charts	
Pictures (sets)	
Objects, models, specimens	
Motion picture films	
Filmstrips	
Recordings	
Motion picture projectors	
Filmstrip and/or slide projectors	
Record players	
Tape recorders	
Opaque projectors	
Overhead projectors	
Radios	
Television sets	
Cameras	
Other (list): ____________________	
____________________	

WHAT SERVICES IN INSTRUCTIONAL MATERIALS AND EQUIPMENT ARE PROVIDED ON SYSTEM LEVEL? Check each item which applies:

Maintenance of equipment ______________

Circulation of equipment ______________

Maintenance of materials ______________

Circulation of materials ______________

Selection of equipment ______________

Selection of materials ______________

Planning and conducting in-service programs for effective use of materials and equipment ______________

Developing adequate classroom facilities for projected materials ______________

Sponsoring experimental projects in the use of instructional media ______________

Other (list): ______________________________

____

____

WHO ADMINISTERS YOUR SYSTEMWIDE INSTRUCTIONAL MATERIALS PROGRAM?

Name:__________________________ Position__________________________

WHAT OTHER MAJOR DUTIES DOES THIS INDIVIDUAL HAVE?

____

____

WHAT TRAINING HAS THIS INDIVIDUAL HAD IN INSTRUCTIONAL MATERIALS?

____

____

WHAT FACTORS DO YOU FEEL INFLUENCE THE FREQUENCY AND EFFECTIVENESS OF USE OF INSTRUCTIONAL MATERIALS AND EQUIPMENT IN THE SCHOOLS OF YOUR SYSTEM?

	Check those items which apply
Materials and equipment are too expensive	
Equipment is too difficult to operate	
It is too difficult to move equipment to various classrooms	
Materials are generally inappropriate for our use	
Materials are too easily damaged	
We have trouble keeping equipment in working order	
Teachers have little or no training in this field	
Teachers aren't interested in using these materials in their teaching	
Teachers don't know where or how to secure materials	
Teachers don't think the use of these materials is worthwhile	
Teachers can't operate equipment	
Teachers just don't know how to use these materials and equipment effectively	
Teachers don't feel that they have the time required to secure and use these materials	
Teachers are afraid they will damage materials or equipment	
Teachers are afraid of criticism by other teachers if they use these materials	
There is no source of professional help in setting up this kind of program in our schools	
We can't allow time for someone to coordinate a program of this type in our schools	
We can't darken our classrooms	
We do not have an organized plan for storing and circulating materials and equipment to our teachers	
We can't secure materials when they are needed	
There are too many administrative details involved in securing and using materials	
Parents and/or Board of Education members are not enthusiastic about using these materials	
Other (list):	

ON THE BACK OF THIS SHEET WRITE ANY COMMENTS WHICH YOU WISH TO MAKE REGARDING THE STATE INSTRUCTIONAL MEDIA PROGRAM.

INSTRUCTIONAL MEDIA SURVEY

(Form for Principals)

SCHOOL ____

SYSTEM ____

PRINCIPAL ____

Grades in school ______________

Number teachers ______________ Number pupils ______________

WHICH OF THE FOLLOWING INSTRUCTIONAL MATERIALS DO YOU CONSIDER NECESSARY FOR EFFECTIVE TEACHING IN YOUR SCHOOL?

Check each item in appropriate column

	Absolutely necessary	Desirable but not essential	Not needed
Textbooks			
Reference books			
Other printed materials			
Programed textbooks			
Teaching machines			
Maps, globes, charts			
Pictures (all types)			
Objects, models, specimens			
Motion picture films			
Filmstrips			
Slides			
Recordings			
Radio programs			
Television programs			
Other (list):			

INFORMATION INCLUDED BELOW PERTAINS ONLY TO THOSE MATERIALS AND EQUIPMENT KEPT IN YOUR SCHOOL. DO NOT INCLUDE THOSE ITEMS WHICH YOU BORROW FROM THE STATE DEPARTMENT AND FROM YOUR SYSTEM OFFICE.

	Number available in school
Reference books (sets)	__________
Other printed materials	__________
Programed textbooks	__________
Teaching machines	__________
Maps, globes, charts	__________
Pictures (sets)	__________
Objects, models, specimens	__________
Motion picture films	__________
Filmstrips	__________
Recordings	__________
Motion picture projectors	__________
Filmstrip and/or slide projectors	__________
Record players	__________
Tape recorders	__________
Opaque projectors	__________
Overhead projectors	__________
Radios	__________
Television sets	__________
Cameras	__________
Others (list): ____________________	__________
____________________	__________

HOW MANY CLASSROOMS ARE THERE IN YOUR BUILDING(S)?__________________________

HOW MANY OF THESE CLASSROOMS CAN BE DARKENED FOR THE USE OF PROJECTED MATERIALS?

____

WHO COORDINATES THE USE OF INSTRUCTIONAL MATERIALS AND EQUIPMENT IN YOUR SCHOOL?

Name:____________________________Position_________________________

WHAT OTHER DUTIES DOES THIS INDIVIDUAL HAVE?

____

____

____

IS THIS INDIVIDUAL PAID A SUPPLEMENT FOR WORKING WITH INSTRUCTIONAL MATERIALS AND EQUIPMENT?

_______________IF SO, HOW MUCH?______________________

HOW MUCH RELEASED TIME DOES THIS INDIVIDUAL HAVE PER DAY TO COORDINATE THE USE OF INSTRUCTIONAL MATERIALS AND EQUIPMENT IN THE SCHOOL?

____

WHAT TRAINING HAS THIS INDIVIDUAL HAD IN INSTRUCTIONAL MATERIALS?

____

____

____

DOES YOUR SCHOOL USE THE STATE DEPARTMENT OF EDUCATION FILM SERVICE?__________

COMMENT ON THIS SERVICE AS IT APPLIES TO YOUR SCHOOL:

____

____

____

DOES YOUR SCHOOL USE THE STATE DEPARTMENT TAPE RECORDING SERVICE?___________

COMMENT ON THIS SERVICE AS IT APPLIES TO YOUR SCHOOL:

____

____

____

WHICH OF THE FOLLOWING INSTRUCTIONAL MATERIALS AND EQUIPMENT SERVICES DO YOU THINK SHOULD BE FURNISHED BY THE STATE DEPARTMENT OF EDUCATION?

	Check appropriate column	
	YES	NO
Furnish consultative services in the use of materials		
Furnish consultative services in the administration of instructional materials		
Produce materials (such as films, filmstrips, etc., for statewide use)		
Conduct local workshops for teachers		
Provide educational radio programs		
Develop standards for teacher education in the use of instructional materials		
Plan school buildings to facilitate the use of instructional materials		
Produce ETV programs		
Other (write in):		

FOLLOWING IS A LIST OF FUNCTIONS GENERALLY RECOGNIZED AS NECESSARY TO THE EFFECTIVE USE OF INSTRUCTIONAL MATERIALS IN A SCHOOL. WRITE IN, AFTER EACH ITEM, THE JOB OF THE PERSON (TEACHER, PRINCIPAL, A-V COORDINATOR, LIBRARIAN, PUPIL, ETC.) WHO PERFORMS THESE FUNCTIONS IN YOUR SCHOOL. OMIT THOSE ITEMS WHICH DO NOT APPLY.

Scheduling equipment for use ____________________

Maintaining equipment ____________________

Moving equipment to point of use ____________________

Ordering and returning materials (such as motion picture films and tapes) ____________________

Scheduling materials for use ____________________

Circulating materials to teachers ____________________

Selecting equipment to be purchased ____________________

Selecting materials to be purchased ____________________

Organizing and classifying materials for circulation ____________________

Informing faculty members of materials and equipment available for use ____________________

Teaching faculty members to operate equipment ____________________

Teaching students to operate equipment ____________________

Preparing lists of materials available ____________________

Developing adequate classroom facilities for projected presentations ____________________

Helping teachers use materials and equipment effectively ____________________

Preparing simple instructional materials ____________________

Other functions which you recognize, not listed above:

____________________________________ ____________________

____________________________________ ____________________

____________________________________ ____________________

WHAT FACTORS INFLUENCE THE FREQUENCY AND EFFECTIVENESS OF THE USE OF INSTRUCTIONAL MATERIALS AND EQUIPMENT IN YOUR SCHOOL?

	Check those which apply to your school
Materials and equipment are too expensive	
Equipment is too difficult to operate	
It is too difficult to move equipment to various classrooms	
Materials are generally inappropriate for our use	
Materials are too easily damaged	
We have trouble keeping equipment in working order	
Teachers have little or no training in this field	
Teachers aren't interested in using these materials in their teaching	
Teachers don't know where and how to secure materials	
Teachers don't think the use of these materials is worthwhile	
Teachers can't operate the equipment	
Teachers just don't know how to use these materials and equipment effectively	
Teachers don't feel that they have the time required to secure and use these materials	
Teachers are afraid they will damage materials or equipment	
Teachers are afraid of criticism by other teachers if they use these materials	
There is no source of professional help in setting up this kind of program in our school	
We can't allow time for someone to coordinate a program of this type in our school	
We can't darken our classrooms	
We do not have an organized plan for storing and circulating materials and equipment to our teachers	
We can't secure materials when they are needed	
There are too many administrative details involved in securing and using materials	
Parents and/or Board of Education members are not enthusiastic about using these materials	
Others (list):	

ON THE BACK OF THIS SHEET WRITE ANY COMMENTS WHICH YOU WISH TO MAKE REGARDING THE STATE INSTRUCTIONAL MEDIA PROGRAM.

INSTRUCTIONAL MEDIA SURVEY

(Form for Teachers)

SCHOOL____________________ SYSTEM__________ __________

TEACHER'S NAME_______________ CERTIFICATE HELD______ YRS. TEACHING EXP._____

GRADE_______________ SUBJECT FIELD(S) IF H. S.____________________

WHICH OF THE FOLLOWING ARE AVAILABLE TO YOU FOR USE IN YOUR TEACHING? WHICH DO YOU CONSIDER NECESSARY TO EFFECTIVE TEACHING? HOW OFTEN DO YOU USE THESE MATERIALS IN YOUR TEACHING?

Check each item in the appropriate columns

	Available for my use	I consider use necessary for effective teaching	I use frequently	I use occasionally	I never use
Textbooks					
Reference books					
Other printed materials					
Programed textbooks					
Teaching machines					
Maps, globes, charts					
Pictures					
Objects, models, specimens					
Motion picture films					
Filmstrips					
Recordings					
Radio programs					
Television programs					
Other (list):					

WHERE ARE THE FOLLOWING USED IN YOUR TEACHING?

	Check each item in the appropriate column(s)			
	Classroom	Audio-Visual Room	Auditorium	Cafeteri
Motion picture films				
Filmstrips				
Tape recordings				
Phonograph records				
Radio programs				
Television programs				

WHO SELECTS THE FOLLOWING FOR USE BY THE TEACHERS IN YOUR SCHOOL?

	Check each item in the appropriate column(s)			
	Teacher	Principal	Audio-Visual Coordinator	A Committee
Motion picture films				
Filmstrips				
Tape recordings				
Phonograph records				
Radio programs				
Television programs				

HOW MANY OF EACH OF THE FOLLOWING DO YOU USE WITH YOUR CLASS AT ONE TIME?

	Average Number
Motion picture films	
Filmstrips	
Tape recordings	
Phonograph records	

WHO OPERATES THE EQUIPMENT WHEN YOU USE THE FOLLOWING IN YOUR TEACHING?

Check each item in the appropriate column(s)

	Classroom Teacher	A Pupil	The Principal	Audio-Visual Coordinator	Another Teacher	Custodian
Motion picture films						
Filmstrips						
Tape recordings						
Phonograph records						
Radio programs						
Television programs						

DO YOU USE THE FOLLOWING WITH YOUR CLASS ONLY, OR ARE OTHER CLASSES PRESENT ALSO?
DO YOU REMAIN WITH YOUR PUPILS WHILE THE MATERIAL IS USED?

Check each item in appropriate column(s)

	With my class only	Other classes present also	Teacher present when material used
Motion picture films			
Filmstrips			
Tape recordings			
Phonograph records			
Radio programs			
Television programs			

ABOUT HOW MANY OF EACH OF THE FOLLOWING DO YOU USE IN YOUR TEACHING DURING A WEEK?

	Average number per week
Motion picture films	
Filmstrips	
Tape recordings	
Phonograph records	
Radio programs	
Television programs	

HOW OFTEN DOES THE CONTENT OF THE MATERIAL (FILM, TV PROGRAM, ETC.) ILLUSTRATE EXACTLY WHAT YOU ARE TEACHING AT THE TIME?

Always________Frequently________Occasionally________Never________

WHAT PREPARATION DO YOU MAKE BEFORE USING THE FOLLOWING MATERIALS WITH YOUR PUPILS?

Check each item in the appropriate column(s)

	Preview or audition	Study teacher's guide	Read catalog descriptions	Make no preparation
Motion picture films				
Filmstrips				
Tape recordings				
Phonograph records				
Radio programs	XXX		XXX	
Television programs	XXX		XXX	

HOW OFTEN DO YOU USE THE SAME PIECES OF THE FOLLOWING MATERIALS WITH YOUR PUPILS MORE THAN ONCE?

Check each item in the appropriate column(s)

	Always	Frequently	Occasionally	Never
Motion picture films				
Filmstrips				
Tape recordings				
Phonograph records				

WHAT DO YOU DO IN YOUR CLASSROOM BEFORE THE FOLLOWING MATERIAL IS USED?

Check each item in the appropriate columns

	Nothing	Discuss content	Raise questions	Other (write in)
Motion picture films				
Filmstrips				
Tape recordings				
Phonograph records				
Radio programs				
Television programs				

WHAT DO YOU DO IN YOUR CLASSROOM AFTER THE FOLLOWING MATERIAL IS USED?

Check each item in the appropriate columns

	Nothing	Discuss content	Answer questions	Other (write in)
Motion picture films				
Filmstrips				
Tape recordings				
Phonograph records				
Radio programs				
Television programs				

WHAT TRAINING HAVE YOU HAD IN THE USE OF INSTRUCTIONAL MATERIALS AND EQUIPMENT?

Course__________ Workshop__________

Unit in a seminar course__________ Unit in a methods course__________

Other (write in):

WHAT FACTORS INFLUENCE THE FREQUENCY AND EFFECTIVENESS OF USE OF INSTRUCTIONAL MATERIALS AND EQUIPMENT IN YOUR TEACHING?

	Check statements which apply to your use of materials
Materials and equipment are too expensive	
Equipment is too difficult to operate	
It is too difficult to move equipment to various classrooms	
Materials are generally inappropriate for my use	
Materials are too easily damaged	
Equipment is not kept in good working order	
I have little or no training in this field	
I am not interested in using these materials in my teaching	
I don't know where and how to secure materials	
I don't think the use of these materials is worthwhile	
I can't operate the equipment	
I just don't know how to use these materials and equipment effectively	
I don't feel that I have the time required to secure and use these materials	
I am afraid I will damage materials or equipment	
I am afraid of criticism by other teachers if I use these materials	
There is no source of professional help in using these materials	
I can't darken my classroom	
Materials and equipment are not stored and circulated according to an organized plan	
I can't secure materials when they are needed	
There are too many details involved in securing and using these materials	
Parents and/or Board of Education members are not enthusiastic about using these materials	
Other:	